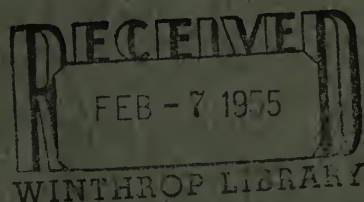


Index of Generic Names of Fossil Plants, 1820–1950

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Index of Generic Names of Fossil Plants, 1820–1950

By HENRY N. ANDREWS, JR.

G E O L O G I C A L S U R V E Y B U L L E T I N 1 0 1 3

*Based on the Compendium Index of
Paleobotany of the United States
Geological Survey*



UNITED STATES DEPARTMENT OF THE INTERIOR

Douglas McKay, *Secretary*

GEOLOGICAL SURVEY

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ABSTRACT

This work comprises an index of generic names of fossil plants, exclusive of the diatoms, that have been published from 1820 through 1950. It is based on the U. S. Geological Survey's working Compendium Index of Paleobotany and its accompanying bibliography. Although several hundred genera have been added by the author, it is realized that the list is not complete, particularly for the past two decades.

An attempt has been made to cite for each genus a type species, or one that is representative. In addition a brief notation is given concerning the age, geographic origin, and taxonomic status of most of the fossils. For some plants this information is further supplemented with such notations as seemed desirable to aid most effectively those persons who may have occasion to seek the type of information that is presented. It may be emphasized that this is not a critical study but is intended rather as an informational source concerning the origin of the respective generic concepts.

The introduction includes a sketch of the historical origin of the Compendium and states in some detail the types of problems encountered in presenting the work in this form. The bibliography presents primarily the full citations of those references indicated in the index.

INTRODUCTION

The Paleobotanical Library of the U. S. Geological Survey, Paleontology and Stratigraphy Branch, includes a card file index and bibliography of names assigned to fossil plants.¹ The Index was started in the latter part of the last century and by about 1933 it had developed to a point where it probably represented a compilation of binomials assigned to fossil plants since 1820 that is as nearly complete as is attainable.

After 1933 the indexing was carried on in a somewhat less thorough manner. However, in recognition of the unique importance of this reference source, effort is now being made to bring the Compendium Index up to date and to maintain it thereafter. Because of its importance and especially because of the little publicity that the index

¹ Prepared by members of the Paleontology and Stratigraphy Branch, U. S. Geological Survey, *see* 1952, Availability of U. S. Geological Survey technical files in Paleontology: *Geol. Soc. America Bull.*, v. 63, no. 5, p. 519-520; *Jour. Paleontology*, v. 26, no. 3, p. 535-536.

has received, it seems desirable to record something of its origin and development.

Microfilm copies of the complete index and accompanying bibliography are now available for sale on a cost basis.²

ACKNOWLEDGMENTS

The Geological Survey's Paleobotanical Library as well as the Compendium Index and bibliography were initiated chiefly through the efforts of Lester Frank Ward. Ward is well known for his historical and bibliographical works in the field of paleobotany, the most distinguished of these being a "Sketch of paleobotany" in the Fifth Annual Report of the Director of the U. S. Geological Survey, in 1885, and The Geographical Distribution of Fossil Plants, which appeared in the Eighth Annual Report in 1889. Shortly after his appointment as assistant geologist on the U. S. Geological Survey about 1881, Ward began work on a paleobotanical index that was apparently intended to include a citation of all fossil species believed to be of plant origin. This project was initiated, using quarto-size notebooks, and nine of these large volumes eventually were nearly filled. At present they are on file in the Paleobotanical Library.

Frank Hall Knowlton was appointed "aid in Botany" at the Smithsonian Institution in November 1884 and was transferred to the Geological Survey as assistant paleontologist in June 1889. I am not able to appraise Knowlton's influence in the early days of this bibliographic work although we have concrete evidence of his interest in it as well as a practical application in his paper, "A catalogue of the Cretaceous and Tertiary plants of North America," published in 1898. This was followed in 1919 by an amplified edition called "A catalogue of the Mesozoic and Cenozoic plants of North America."³ A Supplement to that work was issued in 1944 by Robert Smith Lamotte.

David White started working for Lester Ward in May 1886 and was appointed to the Geological Survey the following October. White's contributions to the general progress of the Survey and the science are, of course, well known.⁴ Through David White's efforts, Miss Charlotte H. Schmidt was brought in to carry on the bibliographic work after Lester Ward left the Survey.

The compilation of a large index in notebook form is a cumbersome task and the fact that it was rapidly becoming impossible is evident from a perusal of Ward's first volume, where the entries are excessively crowded. Probably through the interest and planning of Ward, White, and Knowlton this was abandoned and the work trans-

² See footnote 1.

³ Knowlton, F. H., 1919, A catalogue of the Mesozoic and Cenozoic plants of North America: U. S. Geol. Survey, Bull. 696.

⁴ Schuchert, Charles, 1936, Biographical memoir of David White: Natl. Acad. Sci. Mem. 9, v. 17, p. 189-221.

ferred to slips of paper, approximately $2\frac{1}{2}$ by 8 inches, with an accompanying bibliography recorded on 4- by 6-inch cards. This transfer was apparently initiated about 1900. Considerable thought had been devoted to the work from the standpoint of its being a long-range project and with regard to ultimate publication. The first clear-cut evidence of this that I have found is a ten-page letter dated June 23, 1904 (files of the Paleobotanical Library, U. S. Geol. Survey), from chief geologist C. W. Hayes to Lester Ward. Because this letter may be taken as the starting point of the Compendium Index in its present form, it seems significant to record certain facts concerning the official Survey attitude toward the project as stated by Hayes. The instructions deal separately with the Index and bibliography. It was originally intended that the bibliography be published and that it should include all significant references to descriptions and figures of fossil plants.

The bibliography accompanying this present work is strictly subordinate to the Compendium Index and is by no means complete. This, however, need not be regarded as a violation of the original intention stated by Hayes. All concerned will agree that the index of plant names is the important feature of the project, and to reduce the cost of publication a bibliography has been compiled primarily to serve the needs of the index.

Regarding the index, Hayes notes that "Work should be continued upon the Index of Paleobotany along the same general lines as heretofore pursued, but with certain modifications indicated below." The modifications include the following instructions: Each slip should bear a complete reference to the species under consideration; "the type species of each genus should be determined by the currently accepted rules of nomenclature and should also be so marked, either by a conventional sign, or the word 'Type'"; the zone and locality should be given; in addition to the original publication, references should be given in which orthographical or nomenclatural changes are recorded; names of diatoms are to be omitted; and remarks concerning acceptable form of publication by the Geological Survey are included.

Apparently Lester Ward relinquished official charge of the project shortly after the date of the letter mentioned above, for in a second one from C. W. Hayes dated February 9, 1905, David White and F. H. Knowlton were appointed a "special committee to have charge of all Survey bibliographic work in paleobotany" and Miss Charlotte Schmidt was appointed to "continue work on the paleobotanical bibliography under the immediate supervision of this committee." Miss Schmidt continued in this capacity until her retirement on June 6, 1928. She was succeeded by Miss E. M. Thom during the period of December 1928 to July 1933.

During the years 1933-45 the progress of the Compendium remained nearly quiescent although additions to the bibliography were made by Roland W. Brown and Charles B. Read. From July 1945 until 1950, under the direction of Dr. Brown, Mrs. Marie Wandel worked part time at bringing the project up to date. It was largely through the continuing interest of Dr. Brown that an active program was ultimately re-established and that continuance of the project was assured by the assignment to it, in February 1951, of Mrs. Jane Evans. Mrs. Evans is now engaged, under the direction of Sergius H. Mamay, in the difficult task of keeping the index and bibliography up to date and gathering up the omissions of the past 20 years.

Finally, I should like to acknowledge with gratitude the assistance of the library staff of the Missouri Botanical Garden, St. Louis, where it was possible to check a great many of the references.

ORGANIZATION AND SCOPE OF THE COMPENDIUM INDEX

The Compendium Index consists of about 135,000 slips bearing the names of species of fossil plants or living plants that have been reported in fossil form. The arrangement is alphabetical according to genus, and the species are alphabetically arranged within each genus. Many species are represented by two or more slips corresponding to as many publications in which they are described. Consequently the 135,000 slips do not imply as many species. It is my estimate that there are about half that many represented.

After the first slip for each genus considered below the following information is recorded for each species: The genus, species, and author or authors; this is followed by an abbreviated bibliographic citation. In general this citation is sufficient to lead one directly to the original source, but I have found an appreciable number in which the abbreviation is too brief, and one must therefore refer to the accompanying bibliography of some 17,000 references where the title of the article and journal are given more fully. For most species a brief notation regarding the age and geographic location is also given on the slip.

As to the first slip for each genus, we may consider the two "kinds" of genera represented, those based on modern plants and those based on fossil plants. For the genera based on modern plants, only the genus and author are given. If further information is needed for such genera, one must refer to the Index Kewensis or other reference works dealing with living plants. For the genera based on fossil plants, this first slip cites a type species with its bibliographic data. This species is repeated in its respective alphabetical order. More will be said about the type species in the following section.

PLAN OF THE GENERIC INDEX

The present task was undertaken with the knowledge that it probably would not be possible in the immediate future to publish formally the compendium in full, owing to financial reasons and the vast amount of editorial work that would be required. The present Generic Index was therefore prepared to supply basic information concerning the starting date of the names of all fossil genera, which it was felt would serve a useful purpose to working paleobotanists and which could be integrated into a complete index if such proved possible later. There are, therefore, several very important points which should be considered by those using this index.

The Generic Index is in no sense a critical treatment. The primary objective has been to cite for each genus a type or representative species that will serve as a much-needed basic reference for paleobotanical taxonomy. Two points may be stressed here. First, it should be noted that no botanical authority stands back of these proposed "types." The species cited here are mostly the ones that are, on somewhat casual inspection, presumed to be the types for the genera. For only a few species has critical opinion been available. Many revisions will be necessary because of initial errors or mistakes in subsequent interpretation. Second, the question will certainly be raised concerning the necessity of detailed editing if, indeed, the type species is already noted in the Compendium Index. This second point must be considered in some detail.

It was the intention of the present writer and his associates to cite useful basic information concerning the names for all fossil plant genera. Actually this is not always given in the Compendium Index in the "type slip." The latter in all or nearly all cases leads one to the original citation of the first binomial published for the genus. It is my estimate that from one-quarter to one-third of these are of no real value for the following reasons: In hundreds of cases they are nomina nuda that were followed (but not invariably) by valid descriptions in later publications; in many instances the original descriptions are so brief as to be of no real use; in hundreds of cases no illustrations are given or an illustration only is given. It is of course understood that illustrations are not required for valid publication before 1912; yet reference to an illustration or particular specimens that may be recovered and studied is usually necessary for satisfactory understanding of any fossil.

It therefore became evident, in spite of the genuinely monumental work of Lester Ward and Charlotte Schmidt, that the starting date of each generic name should be checked by reference to the original source. This has been done by the present writer for approximately 90 percent of the genera. The balance were not checked, chiefly because of the extreme rarity of some of the references.

There are two points in particular, bearing on valid publication, which deserve consideration. First, the concept of a "description" has certainly varied in the minds of different paleobotanists. These range from a short phrase, which may convey little or much, to lengthy ones of many pages. In the present work the term "nom. nud." is applied only where there is no description at all. Second, hundreds of new genera of fossil plants have been created via the "new combination" route. It seems to have been the delight of many paleobotanists of the past to create new names under the slightest pretext. From the standpoint of taxonomy, the fact that new genera have been set up on trivial grounds, is, however, not the most serious problem. The ways in which new combinations have been established are many and equally varied. Sometimes these have been made formally and in the most clear-cut fashion, often accompanied by additional description and illustrations. At the other extreme the generic name has been merely "suggested" as being more suitable for certain species, and it is sometimes difficult to know just how serious the author's intentions were.

Usage of names in the present report has been determined chiefly by the established conventions of the science. That is, it appears that most workers in the field in the past have required but little formality in this respect; they have not deemed it necessary that the author of a new genus (based on a previously described fossil) should cite the original source with any degree of formality. Actually no generic names that are included in the Compendium Index have been omitted.

The information given for each genus in the Generic Index is then, as follows: For the first described species of each genus, the genus, species, and authorship is given, followed by a date, page number, and reference to plate or text figures; this is followed by a brief notation concerning the affinities of the fossil (not recorded in the Compendium Index), the geological horizon and age, and the geographical location. If an illustration did not accompany the first valid description (before 1912), I have also cited the next reference in chronological order where an illustration appears. Other sources of information are also indicated where it was felt they would be useful.

Where a new genus was created by new combination, I have added a citation to the original description of the species. There are thus two "types" of records, examples of which are as follows:

PITYOIDOLEPIS Hollick and Jeffrey, 1909.

Pityoidolepis statenensis Hollick and Jeffrey, 1909, p. 54, pl. 9, figs. 13, 14; cone scale, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

In this case we are dealing with a clear-cut new description and the reference may be consulted by referring to Hollick and Jeffrey for the year 1909 in the Bibliography.

PASSALOSTROBUS Endlicher, 1847.

Passalostrobus tessellatus (Bowerbank) Endlicher, 1847, p. 278. For *Cupressinites tessellatus* Bowerbank, 1840, p. 63, pl. 10, figs. 26, 27, 30, 31; cone, Coniferales; Eocene; Sheppey, Kent, England.

Reference to Endlicher for 1847 in the Bibliography leads to the original source of the genus, whereas reference to Bowerbank for 1840 leads to the original description of the species which is accompanied by illustrations. This second reference is sometimes omitted where the first presents an adequate description with illustration.

There are, necessarily, variations from these two patterns, and I should like to emphasize that my principal effort has been to present pertinent and significant information bearing on the initiation of each genus which will be of use in solving taxonomic problems. To do this, it is at least necessary to emphasize that every valid genus must include a species that is recognized as its nomenclatural type.

PROBLEMS IN NOMENCLATURE

The preparation of a work such as the present report reveals the greatness of some workers and the shortcomings of others; it displays the many pitfalls that all may stumble into; and it portrays with startling clarity the real character, or at least certain facets of character, of those who have contributed to or confused their science. It would not be polite to reveal all nor would it be to the point.

As indicated above, the Compendium is by no means complete after 1933 although an effort is now being made to remedy that defect. It seemed most desirable, however, to bring the Generic Index up to date insofar as possible at the time of its publication. The present writer has added names of several hundred genera although he is well aware that there are probably many proposed during the past two decades that are not included. The cooperation of all paleobotanists is invited to achieve this end, and it is planned that such omissions will be included in a later supplement.

There are of course many genera in which a type species means nothing. Two categories come to mind here; there are the dozens of genera based on minute fragments of fernlike foliage that display no significant characters and yield no clew to their affinities; there are also scores of genera based on highly problematical remains which, apparently for lack of a better guess, are called "algae." Undoubtedly many of these latter "genera" do not even represent organic remains.

The authors have clearly stated that some genera are not natural and a type species therefore cannot be established. For example, *Bennetticarpus*, Harris, T. M., 1932b, is presumed to be a bennettitalean fruit, but its more exact affinities are not known, and Harris (1932b, p. 101) states "*Bennetticarpus*, not being a natural genus, has no Type-species." For such genera I have simply cited the first species

described or one that is especially well described and illustrated. It thus serves, if not as a type species, as an informational source to the original treatment of the genus. Acceptance or rejection of Harris' philosophy in this and like cases is not a concern of the present work.

The establishment of genera and species is certainly justifiable when the fossil remains are well preserved even though the affinities cannot be determined, but there is no justification for setting up new names when the natural relationships cannot be determined because of poor preservation. Paleobotanists who cannot refrain from bringing such specimens into their laboratories should at least refrain from recording them in print.

Delayed publication of valid names is perhaps the most common cause of nomenclatural confusion. Some instances appear to have been unintentional whereas others clearly have been due to the author's hurry to see his binomials in print or to "stake out a claim" on a particular locality. Regardless of the reason it seems inexcusable. Nearly as bad is the publication of very brief descriptions designed to meet the minimum requirements of the rules until the author may, at his leisure (many years later or never), describe the fossils in proper fashion.

The case of *Botrychioxylon* may be cited as an example. The generic name was published with a brief account by Dukinfield Henry Scott in 1906; it was referred to in several publications through the next few years (Scott, 1907; Scott, 1909; Bower, 1911), but it was not until 1912 that a full account was given and a specific name applied.

Burserites Berry presents an interesting example. In 1921 Edward Wilbur Berry described *Burserites venezuelana* n. sp. and in 1924 appeared the description of *B. fayettensis* under the heading of *Burserites* n. gen. Apparently the latter (original) description was delayed in going to press until after the later described *B. venezuelana* appeared in print. Here it is the clear intention of the author that *B. fayettensis* should serve as the type for the genus and therefore should be accepted as such.

Perhaps the most serious violation of all rules, written and unwritten, is the publication of a generic name for possible future use; a few examples may be cited: Dawson (1881, p. 11) proposed the name *Isoetoides* for spores, compared with *Isoetes*, with no description or specific name, the name being simply "suggested . . . pending further investigation"; and Berry (1911, p. 242) in discussing the taxonomy of *Gladophlebis* suggested the possibility of transferring certain species to the new generic entity *Aspidiopteris*.

In the past, authors have not stated clearly that the genus they are describing is new. In this respect I feel that Miss Schmidt performed an especially remarkable task in seeking out the original source.

Many generic names have been duplicated or even triplicated, and again it is to Miss Schmidt's credit that she has been able to sort out the various species described and attribute them to the correct author's genus. Whether or not these are correct in every case in the Compendium Index, I am unable to say. This general problem is further complicated by the propensity of some writers to alter existing generic names very slightly and append their own names to them; the works of Schimper and Meschinelli are noteworthy in this respect. It must of course be remembered that rules of nomenclature were scarcely in existence and certainly not well agreed on at the time when these treatises appeared.

The correction of orthographic errors has resulted in no little confusion in the literature; for example, the multiplicity of spellings in cases such as *Lepidofloyos*—*Lepidophloios*—*Lepidophloyos* and *Cardiocarpon*—*Cardiocarpum*—*Cardiocarpus* may be cited as typical. In most cases the generally accepted spelling has been adopted here. Although it is recognized that the International Rules of Botanical Nomenclature clearly allow correction of unintentional orthographic errors (1935 ed., sec. 13), it is the present writer's opinion that acceptance of the original spelling is preferable unless an especially bad misspelling is involved.

Undoubtedly the description of fragmentary and meaningless scraps of fossil plants has brought more richly deserved criticism to paleobotany than any other shortcomings of the science. Some workers admittedly consider it their duty to give a name to everything including inferior or poorly preserved material that conveys no knowledge to themselves or to others. This practice is not confined to the distant past.

Paleobotanists, particularly those dealing with remains of late Mesozoic and Cenozoic age, have always been concerned with the problem of whether or not to use generic names based on living plants. For example, is a maplelike leaf actually referable to *Acer* or, for reason of question, should it be assigned to a different genus called *Acerites* or *Aceriphyllum*, etc.? Similarly we have *Juglandinium* Unger, *Juglandoxylon* Kraus, *Juglansoxylon* Falqui, and *Jugloxylon* Stopes and Fujii, all of which are based on woods supposedly comparable with that of modern *Juglans*.

A very recent practice is the introduction by certain spore and pollen workers of the taxonomic entity "Nov. Sporomorph." Pollens are unique structures but no more deserving of a special taxonomic category than seeds, stems, leaves, or any other organs.

It is perhaps not out of order to comment briefly on the mode of publication of certain of the older works, for example, the monographic contributions of such paleobotanists as Sternberg, Brongniart,

Ettingshausen, Schimper, Lindley and Hutton, Saporta, Unger, and several others. Many of these were first issued in parts, either independently or in journals, over a period of several years and then bound into large volumes, and they have become available to many paleobotanists only in this latter form. In the "Bibliography" I have tried, insofar as possible to give the exact date of publication of the separate parts of such works.

A considerable number of names retained in the Generic Index are based on remains that are probably not of plant origin, or even doubtfully organic. There are also some, such as *Palaeoxyris* and *Vetacapsula*, which were once held to refer to plants and now are definitely assigned as animals. It has seemed most expedient, for the benefit of those who are not familiar with such changes and doubtful cases, to include them.

GEOGRAPHIC AND GEOLOGIC NAMES

A point of considerable concern to the present writer has been that of citing geographical localities. The Compendium slips, and of course the original publications, bear innumerable place names such as Styria, Bohemia, Hesse, Saxony, Liguria, and many others which no longer appear on modern maps. These could of course be translated into the closest modern political equivalents, but whether these would mean anything in another 50 years is debatable. Most of these old names are readily located on C. S. Hammond's "Historical atlas," which is a small and inexpensive booklet; and, as many of them are smaller and more precisely defined geographical units than the countries into which they have since been incorporated, there seems to be no advantage in bringing them up to date.

Geologic names in this bulletin are those employed in the original sources, and their use here does not imply approval by the Geological Survey.

RECENT BIBLIOGRAPHIC LITERATURE

An earnest effort has been made to complete this Generic Index through the year 1950. However, as stated above there are undoubtedly some omissions and particularly for the past two decades. As an aid to those readers who may not be well acquainted with the recent literature in this field, it will be useful to cite the more comprehensive bibliographic literature. The publications referred to below will be found cited more fully in the "Bibliography."

In 1921 the National Research Council, Washington, D. C., started to issue annual reports on American paleobotany. These have continued up to the present and now cover paleobotanical work in both North and South America (see American Paleobotany Report, Na-

tional Research Council). Recent European paleobotany has been thoroughly reviewed in two comprehensive reports (1939-47 and 1948-49) issued by the Paleobotany Department of the Swedish Museum of Natural History under the editorship of Olof H. Selling (see Selling, O. H.). Corresponding reports for Britain have been edited by John Walton for the period 1939-51 (see British Paleobotanists). The Indian reports edited by Birbal Sahni and later by Rajendra Varma Sitholey, cover paleobotanical work in that area for the years 1940-50 (see Indian Paleobotany). The eastern Asiatic area is covered by Oishi's recent "Illustrated catalogue of East-Asiatic fossil plants" (see Oishi, Saburo, 1950). Finally may be mentioned Gothan's list of generic names of fossil plants proposed since 1900. This is not complete for that period, but it does present a very valuable contribution to our bibliographic literature (see Gothan, Walther, 1942b).

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GENERIC INDEX OF FOSSIL PLANTS

This index contains notes on the valid date of establishment of the genus, the type (or a representative) species, and pertinent data pertaining to the latter. For a detailed consideration of the plan of presentation, see "Introduction."

A

AACHENOSAURUS Smets, 1888.

Aachenosaurus multidentis Smets, 1888, pl. 1. See *Aachenoxylon multidentis* (Smets) Hovelacque, 1889, p. 505.

AACHENOXYLON Hovelacque, 1890.

Aachenoxylon multidentis (Smets) Hovelacque, 1890, p. 60, pl. 3; wood, dicotyledon; Upper Cretaceous; Moresnet, Belgium.

ABAKANIELLA Chachloff, 1939.

Abakaniella devonica Chachloff, 1939, p. 91, pls. 1-3; Middle Devonian; Minusinsk Basin, Russia.

ABELIELLA Mägdefrau, 1937.

Abeliella riccioides Mägdefrau, 1937, p. 60, pl. 5, fig. 1; fungus mycelium; Cretaceous; England.

ABIETIPITES Wodehouse, 1933.

Abietipites antiquus Wodehouse, 1933, p. 491, figs. 15, 16; pollen, intermediate *Pinus-Tauga*; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

ABIETITES Hisinger, 1837.

Abietites sternbergii (Nilsson) Hisinger, 1837, p. 110, pl. 34, fig. 3.

ABIETOPITYS Kräusel, 1928.

Abietopitys perforata (Gothan) Kräusel, in Kräusel and Range, 1928, p. 30, pl. 3, fig. 6; pl. 4, figs. 1-4; pl. 5, figs. 3-5; coniferous or cordaitan stem; Karroo beds, Permian; German Southwest Africa.

ABIETOXYLON Houlbert, 1910.

Abietoxylon falunense Houlbert, 1910, p. 73, pl. 6; coniferous wood, compared with *Abies*; Tertiary; Manthelambossée-Paulmy, France.

ABIOCAULIS Suzuki, 1910.

Abiocalulis yezoensis Suzuki, 1910, p. 181, pl. 7, fig. 112; petrified coniferous stem; Upper Cretaceous; Hokkaido, Japan.

ABRONIA Laurent, 1905.

Abronia bronnii Laurent, 1905, p. 161, pl. 12, fig. 7; pl. 13, figs. 1-17; pl. 14, figs. 6, 7, 12; pl. 15, figs. 5-7; pl. 16, figs. 5, 6; fruit, Nyctaginaceae; Pliocene; France.

ACACIAEPHYLLUM Fontaine, 1889.

Acaciaephyllum longifolium Fontaine, 1889, p. 279, pl. 137, fig. 6; pl. 138, figs. 1-3; leaf, dicotyledon; Potomac group, Lower Cretaceous; Dutch Gap Canal, Va.

ACACIAPHYLLITES E. W. Berry, 1914.

Acaciaphyllites grevilleoides E. W. Berry, 1914a, p. 45, pl. 9, figs. 9, 10; leaf, Mimosaceae; Black Creek formation, Upper Cretaceous; Middendorf, Chesterfield County, S. C.

ACACIOXYLON Schenk, 1883.

Acacioxylon antiquum Schenk, 1883a, p. 9; wood; Lower Oligocene; Libyan Desert, Tunisia. Only illustrated species appears to be *Acacioxylon tenax* Felix, in Felix and Nathorst, 1893, p. 49, pl. 3, figs. 4, 6-8.

ACANTHOCARPUS Goeppert, 1865.

Acanthocarpus xanthioides Goeppert, 1865a, p. 177, pl. 26, fig. 27; pl. 28, figs. 8, 9; seed?; Permian; Braunau, Bohemia.

ACANTHOPHYLLITES Grand'Eury, 1890.

Acanthophyllites nicolai Grand'Eury, 1890, p. 262, fig. p. 263; Upper Carboniferous; Mollères and Fontanes, France.

ACANTHOPHYTON Dawson, 1862.

Acanthophyton spinosum Dawson, 1862, p. 324, pl. 12, fig. 6; psilophyte or fragment of fern rachis; Hamilton group, Devonian; New York.

ACANTHOPTERIS Sze, 1931.

Acanthopteris gothani Sze, 1931, p. 53, pl. 7, figs. 2-4; Jurassic; Sunchiakou, Jehol province, China.

ACANTHOTRILETES Naumova, 1949.

Acanthotriletes primigenus Naumova, 1949, p. 54, fig. 14; Lower Cambrian; USSR.

ACERINIUM Unger, 1842.

Acerinium danubiale Unger, 1842b, p. 175; wood; Tertiary; Austria. See also Unger, 1847 (1841-47), p. 136, pl. 44, figs. 9-11.

ACERIPHYLLUM Fontaine, 1889.

Aceriphyllum aralioides Fontaine, 1889 p. 321, pl. 163, fig. 8; leaf, dicotyledon; Potomac group, Lower Cretaceous; "72nd mile post," near Brooke, Va.

ACERITES Viviani, 1833.

Acerites ficifolia Viviani, 1833, p. 131, pl. 11, fig. 5?; leaf, dicotyledon; Tertiary; Stradella, near Pavia, Italy.

ACHAENITES Alexander Braun, 1851.

Achaenites ungeri Alexander Braun, in Stizenberger, 1851, p. 83; dicotyledon; Miocene; Oeningen, Switzerland. See also Braun, Alexander, 1854, p. 147, pl. 3, fig. 18.

ACHLYITES Meschinelli, 1898.

Achlyites penetrans (Duncan) Meschinelli, 1898, p. 10, pl. 7, figs. 7-32; pl. 8, figs. 1-26; fungus, Phycmycete. Meschinelli erroneously attributes this genus to Nees as a fossil form of *Achlya* Nees.

ACICULARIA d'Archiac, 1843.

Acicularia pavantina d'Archiac, 1843, p. 386, pl. 25, fig. 8a; alga; Eocene; Pisseloup, near Pavant, Dépt. de l'Aisne, France.

ACICULELLA Pia, 1927.

Aciculella bacillum Pia, in Hirmer, 1927, p. 86; Dasycladaceae; Triassic. See also Pia, 1930, p. 180, fig. 1c.

ACIPHYLLA Hector, 1886.

Aciphylla pungens Hector, 1886, p. 61, fig. 24a; Cretaceous-Tertiary; Wangopeka, New Zealand.

ACITHECA Schimper, 1879.

Acitheca polymorpha (Brongniart) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66 (9-12); fertile fern leaflet, Marattiaceae; Upper Carboniferous.

ACLISTOCHARA Peck, 1937.

Aclistochara bransoni Peck, 1937, p. 87, pl. 14, figs. 8-11; oogonium, Characeae; Morrison formation, Jurassic?; 18 miles northwest of Rawlins, Wyo.

ACOPHYLLUM Zalesky, 1929.

Acophyllum wolzi Zalesky, 1929a, p. 191, pl. 16, fig. 1; cordate? leaf fragment; Carboniferous; Donets [Donetz], Russia.

ACOROPSIS Conwentz, 1886.

Acoropsis minor Conwentz, 1886, p. 12, pl. 1, figs. 14-17; inflorescence in amber, Araceae; early Tertiary; west Prussia.

ACOXYLON Velenovsky and Viniklar, 1929.

Acoxylon suspectum Velenovsky and Viniklar, 1929, p. 25, pl. 17, fig. 11; pl. 20, fig. 1; pl. 22, figs. 1-4; incertae sedis; Cretaceous; Slivenec, Bohemia.

ACOZAMITES Zalesky, 1936.

Acozamites elegans Zalesky, 1936c, p. 249, figs. 5, 6; cycadophyte? foliage; Triassic; left bank river Nakaz, Bachkirie, Russia.

ACREMONITES Pia, 1927.

Acremonites succineus (Caspary) Pia, in Hirmer, 1927, p. 122; Mucedinaceae, Fungi Imperfecti; Eocene. For *Acremonium succineum* Caspary, 1907, p. 10, pl. 1, fig. 5.

ACROCARPUS Schenk, 1867.

Acrocarpus cuneatus Schenk, 1867, p. 134, pl. 20, figs. 9-12; fern? foliage; Rhætic; Oberwalz, near Bayreuth, Bavaria. [Caption to plate bears name *Acropteris cuneata*, apparently a misprint of the generic name.]

ACROCOILA Mueller, 1877.

Acrocoila anodonta Mueller, 1877a (1877-79), p. 180; Pliocene; Gulgong, Australia.

ACROPTERIS.

See *Acrocarpus* Schenk.

ACROSTICHIDES Fontaine, 1883.

Acrostichides linnaeaeifolius (Bunbury) Fontaine, 1883, p. 25, pl. 6, fig. 3; pl. 7, figs. 1-4; pl. 8, fig. 1; pl. 9, fig. 1; fern foliage; Mesozoic; "The Gowry," Black Heath, Va. A slightly emended version of *Acrostichites* Goeppert.

ACROSTICHITES Goeppert, 1836.

Acrostichites williamsonis (Brongniart) Goeppert, 1836, p. 286; fern foliage; Oolite, Jurassic; near Scarborough, England. For *Pecopteris williamsonis* Brongniart, 1828-38, p. 324, pl. 110, figs. 1, 2.

ACROSTICHOPHYLLUM Velenovsky, 1889.

Acrostichophyllum cretaceum Velenovsky, 1889, p. 28, pl. 2, figs. 22, 23; sterile fern? front fragment; Cretaceous; Vyserovic, Bohemia. [Name only given on page 28; description on page 5 under *Acrostichum cretaceum* Velenovsky.]

ACROSTICHOPTERIS Fontaine, 1889.

Acrostichopteris longipennis Fontaine, 1889, p. 107, pl. 170, fig. 10; pl. 171, figs. 5, 7; fern foliage; Potomac group, Lower Cretaceous; Baltimore, Md.

ACROSTIGMA Wood, 1860.

Acrostigma sp. Wood, 1860, p. 239. [A name suggested by Wood for possible reception of *Lepidodendron dubium*.]

ACTINIDIOPHYLLUM Nathorst, 1888.

Actinidiophyllum sp. Nathorst, 1888, p. 228, pl. 10, fig. 12; leaf, dicotyledon; Tertiary; Japan.

ACTINOCARPUS C. F. W. Braun, 1840.

Actinocarpus mysticus C. F. W. Braun, 1840, p. 105; nom. nud.

ACTINOMYCITES Ellis, 1916.

Actinomyces sp. Ellis, 1916, p. 729; fungus; Inferior Oolitic series, Jurassic; Dunliath, Great Britain.

ACTINOMYCIDIUM Zalesky, 1915.

Actinomyodium floccidum Zalesky, 1915, p. 62, pl. 2, fig. 6; pl. 3, figs. 1-6; pl. 10, figs. 3, 4; pl. 12, fig. 4; Actinomyces; Carboniferous; Russia.

ACTINOPHYLLUM Phillips, 1848.

Actinophyllum plicatum Phillips, in Phillips and Salter, 1848, p. 386, pl. 30, fig. 4; alga? compared with *Acetabulum*; Devonian; near Stoke Edith, Woolhope district, Scotland.

ACTINOPODIUM Hoeg, 1942.

Actinopodium nathorstii Hoeg, 1942, p. 150, pls. 59–60; petrified stem, some similarity with *Schizopodium* of Harris; Devonian; Splitzbergen.

ACTINOPORELLA Raineri, 1922.

Soc. Italiano sci. nat. Atti 1922, v. 61, p. 72, pl. 3, figs. 12–14 (not seen). See also Gothan, 1942b, p. 103.

ACTINOPTERIS Schenk, 1865.

Actinopteris peltata (Goeppert) Schenk, 1865, p. 23, pl. 6, figs. 3–5; similar to *Cyclopteris*.

ACTINOSTROBITES Endlicher, 1847.

Actinostrobitis globosus (Bowerbank) Endlicher, 1847, p. 273. For *Cupressinites globosus* Bowerbank, 1840, p. 52, pl. 10, figs. 12–14, 32, 33.

ADELOCERCIS Unger, 1845.

Adelocercis radobojana Unger, 1845, p. 245; nom. nud.; Leguminosae; Miocene; Radoboj, Croatia.

ADELOPHYTON Renault, 1900.

Adelophyton jutieri Renault, 1900, p. 424, pl. 6; pl. 7, fig. 1; petrified lycopod stem; Carboniferous (Culm); Alsace.

ADENANTHEMUM Conwentz, 1886.

Adenanthemum iteoides Conwentz, 1886, p. 92, pl. 9, figs. 15–25; flower, in amber, Saxifragaceae; early Tertiary, west Prussia.

ADIANTES Wurm, 1925.

Adiantes sp. Wurm, 1925, p. 189; Carboniferous (Culm); Frankenwald, Germany.

ADIANTIDES Schimper, 1869.

Adiantides nervosus (Brongniart) Schimper, 1869 (1869–74), p. 425. For *Sphenopteris nervosus* Brongniart, 1828a–38, p. 174, pl. 66, fig. 2. Based on *Adiantites* Goeppert, although authorship is claimed by Schimper.

ADIANTITES Goeppert, 1836.

Adiantites oblongifolius (Brongniart) Goeppert, 1836, p. 227, pl. 21, figs. 4, 5. [This species selected as the type because it is the first described and illustrated by Goeppert, and because it corresponds with modern usage.]

ADIANTOPHYLLUM Langeron, 1899.

Adiantophyllum reticulatum Langeron, 1899, p. 435, pl. 2, figs. 1, 2; ginkgophyte? leaf; Eocene; Sézanne, France.

ADROPHYLLUM Zalesky, 1937.

Adrophyllum teschekardense Zalesky, 1937b, p. 82, fig. 49; leaf fragment, incertae sedis; Permian; Russia.

AECIDITES Debey and Ettingshausen, 1859.

Aecidites stellatus Debey and Ettingshausen, 1859a, p. 212, pl. 3, figs. 2, 3; fungus; Cretaceous (Cenomanian); Aachen, Rhenish Prussia.

AENIGMATOPHYLLUM Hartung and Gothan, 1939.

Aenigmatophyllum gothani (Krestew) Hartung and Gothan, 1939, p. 520, fig. 1. For *Callipteridium gothani* Krestew, 1928, p. 577, pl. 39, fig. 1.

AESCULIPHYLLUM Nathorst, 1888.

Aesculiphyllum majus Nathorst, 1888, p. 200, pl. 1, fig. 3; *Aesculus*-like leaf; Tertiary; Japan.

AESCULOPHYLLUM Dawson, 1895.

Aesculophyllum hastingsense Dawson, 1895, p. 149, pl. 8, fig. 16; leaf fragment compared with *Aesculus*; Tertiary (Paleocene or Eocene); Burrard's Inlet, Vancouver, British Columbia. Uncertain whether or not this is intended as a new genus.

AETHEOTESTA Brongniart, 1874.

Aetheotesta subglobosa Brongniart, 1874, p. 260, pl. 23, figs. 16–18; silicified seed; Carboniferous; St.-Étienne, France.

AETHOPHYLLUM Brongniart, 1828.

Aethophyllum stipulare Brongniart, 1828d, p. 455, pl. 18, fig. 1; incertae sedis; Sultz-les-Bains, near Strasbourg.

AGARICITES Meschinelli, 1892.

Agaricites wardianus Meschinelli, in Saccardo, 1892, p. 745. See also Meschinelli, 1898, p. 1, pl. 1, figs. 1, 2; fungus; Tertiary; Chiavon, Italy. Meschinelli erroneously attributes this genus to Linnaeus, as a fossil form of *Agaricus* Linnaeus.

AGARITES Saporta, 1890?

Agarites fenestratus Saporta, 1890? (1886–91), p. 314, pl. 276, figs. 1–4; alga; Jurassic; Beaune, France.

AGASOPTERIS Zalesky, 1937.

Agasopteris condomana Zalesky, 1937c, p. 140, fig. 24; fern foliage; Permian; Osmovskiy, Russia.

AGATHOXYLON Hartig, 1848.

Agathoxylon cordaianum Hartig, 1848c, p. 188; wood; Triassic (Keuper); Coburg, Germany.

AGAVITES Abich, 1857.

Agavites araratica Abich, 1857, p. 138, pl. 9, figs. 1–3; Miocene; Russian Armenia.

AGAVITES Visiani, 1869.

Agavites prisca Visiani, 1869, p. 237. See also Visiani, 1875, p. 465, pl. 25.

AGNOPHYTON Massalongo, 1850.

Agnophyton aristatum Massalongo, 1850, p. 29; alga; Eocene; Monte Bolca, Italy.

AGNOTOCAULON Fliche, 1910.

Agnotocaulon mervillense Fliche, 1910, p. 252, pl. 25, figs. 3, 4; stem compression, incertae sedis; Triassic; Meurthe-et-Moselle, Vosges, France.

- AGROSTIDIUM** Massalongo, 1853.
Agrostidium priscum Massalongo, 1853c, p. 130, pl. 3, figs. 1a-b; Eocene; Chla-von, Italy.
- AILANTHIPITES** Wodehouse, 1933.
Ailanthipites berryi Wodehouse, 1933, p. 512, fig. 44; pollen, Simarubaceae; Par-achute Creek member, Green River for-mation, Eocene; Colorado and Utah.
- AILANTHOPHYLLUM** Dawson, 1890.
Ailanthophyllum incertum Dawson, 1890, p. 88, fig. 25; leaf; Tertiary; Tranquille River, British Columbia.
- AILANTOIDITES** Thomson, 1950.
Ailantoidites sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thier-gart, Friedrich, 1950, p. 58; nom. nud., pollen, Simarubaceae; Miocene; Chatt-Aquitain, Germany.
- AIPTERIS** Zalesky, 1939.
Aipteris speciosa Zalesky, 1939b, p. 348, fig. 27; fernlike foliage; Permian; Karanamera, USSR.
- AJUGINUCULA** Reid and Chandler, 1926.
Ajuginucula smithii Reid and Chandler, 1926, p. 127, pl. 8, figs. 17, 18; nutlet, Labiatae; Oligocene; Isle of Wight, Eng-land.
- ALANGIOPHYLLUM** Potbury, 1935.
Alangiophyllum petiocaule Potbury, 1935, p. 79, pls. 15-19; leaf, Cornaceae?; upper Eocene; La Porte, Plumas County, Calif.
- ALASITES** P. H. Fritel, 1923.
Reference not located. Cited in Gothan, 1942b, p. 104.
- ALATAMPULLA** Miner, 1935.
Alatampulla bartlettii Miner, 1935, p. 600, pl. 18, fig. 20; winged seed; Upper Cretaceous; Amisut, Disko Island, Greenland.
- ALATISPORITES** Ibrahim, 1933.
Alatisporites pustulatus Ibrahim, 1933, p. 32, pl. 1, fig. 12; spore, Carboniferous.
- ALBERTIA** Schimper, 1837.
Albertia latifolia Schimper, 1837, p. 13. See also Schimper and Mougeot, 1844, p. 17, pl. 22; Triassic; Soultz-les-Bains, Alsace.
- ALBUCASTRUM** Massalongo, 1859.
Albucastrum perianthiodicum Massalongo, 1859a, p. 59, pl. 23, fig. 1; fruit, Lili-aceae; Eocene; Italy.
- ALCHORNEITES** Langeron, 1899.
Alchorneites mallotoides Langeron, 1899, p. 452, pl. 4, fig. 1; leaf, compared with *Alchornea* and *Mallotus*; Eocene; Sézanne, France.
- ALCICORNOPTERIS** Kidston, 1887.
Alcicoropteris convoluta Kidston, 1887a, p. 152, pl. 8, figs. 11-15; fern? foliage; Calcliferous Sandstone series, Lower Carboniferous; Berwickshire, Scotland.
- ALCYONIDIOPSIS** Massalongo, 1856.
Alcyonidiopsis longobardiae Massalongo, 1856a, p. 48, pl. 7, figs. 1, 2.
- ALCYONIUM** Hisinger, 1823.
Alcyonium sp. Hisinger, 1823, p. 89, pl. 3; Silurian(?); Christiania, Norway.
- ALECTORURUS** Schimper, 1869.
Alcotorurus circinnatus (Brongniart) Schimper, 1869 (1869-74), p. 203. For *Fucoides circinnatus* Brongniart, 1828a-38, p. 83, pl. 3, fig. 3; alga?; Silurian; Lake Wenern, Kinnakulle, Sweden.
- ALETES** Ibrahim, 1933.
Aletes sp. Ibrahim, 1933, p. 37. Only in-formation given is "Sporen ohne jede Dehizensmarke."
- ALETHOPTERIS** Sternberg, 1825.
Alethopteris lonchiticus (Schlotheim) Sternberg, 1825 (1820-38, tentamen), p. xxi; fernlike foliage, probably Pteri-dosperm; Carboniferous; Saarbruck, Germany. Sternberg refers to pl. 1, fig. 22, of Schlotheim, 1804; latter is *Filicites lonchiticus* Schlotheim. Stern-berg gives spelling as *lonchitidis* but Brongniart uses *lonchiticus*; see Brong-niart, 1828a-38, p. 275, pl. 84, figs. 1-7.
- ALGACITES** Schlotheim, 1822.
Algacites orobiformis Schlotheim, 1822, p. 43. For *Carpolithes orobiformis* Schlo-theim, 1820, p. 419, pl. 27, fig. 2; Per-main; Ilmenau, Prussian Saxony.
- ALGITES** Seward, 1894.
Algites valdensis Seward, 1894a, p. 4, pl. 1, fig. 1; alga; Wealden; Ecclesbourne, near Hastings, England.
- ALISMACITES** Saporta, 1862.
Alismacites lancifolius Saporta, 1862, p. 228; leaf, compared with *Alisma*; Ter-tiary; France.
- ALISMAPHYLLITES** Knowlton, 1917.
Alismaphyllites crassifolium Knowlton, 1917, p. 286, pl. 55, fig. 1; leaf, Alismaceae?; Raton formation, Eocene; Trinidad, Colo.
- ALISMAPHYLLUM** E. W. Berry, 1911.
Alismaphyllum victorsoni (Ward) E. W. Berry, 1911a, p. 452, pl. 79, fig. 5; leaf, Alismaceae; Patapsco formation, Lower Cretaceous; White House Bluff, Va.
- ALISPORITES** Daugherty, 1941.
Alisporites opii Daugherty, 1941, p. 98, pl. 34, fig. 2; spore, incertae sedis; Chinle formation, Triassic; Arizona.
- ALLANTODIOPSIS** Knowlton and Maxon, 1919.
Allantodiopsis erosa (Lesquereux) Knowl-ton and Maxon, in Knowlton, 1919, p. 61. For *Pteris erosa* Lesquereux, 1878a, p. 53, pl. 4, fig. 8; pinnule fragment; Tertiary; near Trinidad, N. Mex.

ALLICOSPERMUM Harris, 1935.

Allicospermum cystum Harris, 1935, p. 121, pl. 9, figs. 1-10, 13, 18; gymnosperm seed; late Triassic; Scoresby Sound, east Greenland.

ALLOASTEROPHYLLITES Geyler, 1879.

Alloasterophyllites densifolius (Grand'Eury) Geyler, 1879, p. 795. For *Asterophyllites densifolius* Grand'Eury, 1877, p. 300, pl. 32, fig. 2; Upper Carboniferous; Sagnat Midi, Peron, France.

ALLOOPTERIS Henry Potonie, 1897.

Alloopteris quercifolia (Goeppert) Henry Potonie, 1897 (1897-99), p. 139, fig. 132. This appears to be valid date although name (*Aloopteris*) introduced by Potonie, 1894, p. xlviii.

ALLOXYLON Zalesky, 1927.

Alloxylon primordiale Zalesky, 1927a, p. 45, pl. 28, figs. 1-10; coniferous wood; Permian; Aktyubinsk district, Tourgai province, Russia.

ALMARGEMIA Florin, 1933.

Almargemia dentata (Heer) Florin, 1933, p. 101, pl. 16, figs. 1-7; cycadophyte leaf; Cretaceous (Aptian); Almargem, Portugal.

ALNIPHYLLUM Nathorst, 1886.

Alniphyllum sp. Nathorst, 1886a, p. 53; nom. nud.

ALNIPOLLENITES Robert Potonie, 1934.

Alnipollenites verus Robert Potonie, 1934, p. 58, pl. 2, figs. 13, 17, 18, 25, 26; pl. 6, fig. 28; pollen, Betulaceae; Tertiary (Braunkohle). See also Potonie, Robert, and Venitz, H., 1934, p. 25.

ALNITES Hisinger, 1837.

Alnites friesii (Nilsson) Hisinger, 1837, p. 112, pl. 34, fig. 8.

ALNITES Deane, 1902.

Alnites latifolia Deane, 1902a, p. 63, pl. 15, fig. 4; leaf fragment compared with *Alnus*; Tertiary; Wingello, New South Wales.

ALNOPHYLLUM Staub, 1887.

Alnophyllum reussii (Ettingshausen) Staub, 1887, p. 267. For *Alnites reussii* Ettingshausen, 1853, p. 39, pl. 31, figs. 13-17; leaf, Betulaceae; Tertiary; Haering, Tirol [Tyrol], Austria.

ALNOXYLON Felix, 1884.

Alnoxyton vasculosum Felix, 1884, p. 10, pl. 1, fig. 1; wood; Tertiary; Medgyazo, Hungary.

ALOIOPTERIS.

See *Alloopteris* Henry Potonie.

ALOITES Visiani, 1869.

Aloites italica Visiani, 1869, p. 237; Tertiary; Sostizzo, Italy.

ALSINITES Cockerell, 1925.

Alsinites revelatus Cockerell, 1925, p. 7, pl. 1, fig. 2; plants with flowers, Alsiniaceae; Eocene; Roan Creek opposite Salt Wash, Colo.

ALSOPHILINA Dormitzer, 1853.

Alsophilina kauniziana Dormitzer, in Krejčí, 1853, p. 28, pl. 1; Cretaceous; Kaunitz, Bohemia. See also Potonie, Henry, 1899, p. 67; and Posthumus, 1931.

ALSOPHILITES Hirmer, 1927.

Alsophilites polonica (Radiborski) Hirmer, 1927, p. 641; fertile foliage, Cyathaceae; Jurassic; Cracow, Poland.

AMADOKIA Zalesky, 1931.

Acad. sci. U. R. S. S. Bull. 1931b, p. 577; Lycopidiales; Upper Devonian (not seen). See also Gothan, 1942b, p. 104.

AMANSITES Brongniart, 1849.

Amanites dentata Brongniart, 1849, p. 58. For *Fucoides dentatus* Brongniart, 1828 (1828a-38), p. 70, pl. 6, figs. 9-12; grapholite?; Ordovician(?); Pointe Levi, near Quebec, Canada.

AMBAROXYLON Houlbert, 1910.

Ambaroxylon lecointrae Houlbert, 1910, p. 74, pl. 7; wood compared with *Liquidambar*; Tertiary; Manthelan-Bossée-Paulmy, France.

AMBERITES Lomax, 1911.

Amberites sp. Lomax, 1911, p. 128, pl. 5, figs. 18, 19; a name applied to amber-colored bodies in coal; Arley coal seam (and others), Upper Carboniferous; Atherton, Lancashire, England.

AMDRUPIA Harris, 1932.

Amdrupia stenodonta Harris, 1932a, p. 29, pl. 3, fig. 4; gymnosperm leaf; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

AMEGHINOITES Spegazzini, 1924.

Ameghinoites desiderata Spegazzini, 1924a, p. 102, fig. p. 103; leaf, dicotyledon; Eocene; Patagonia.

AMESONEURON Goeppert, 1852.

Amesoneuron noeggerathiae Goeppert, 1852a, p. 264, pl. 33, fig. 3a; fragment of palm leaf; Tertiary; Germany.

AMICDOPHYLLUM.

Error for *Ancistrophylum*, in Fritsch, 1908, p. 23.

AMMATOPHYLLUM Zalesky, 1936.

Ammatophyllum uninervium Zalesky, 1936a, p. 223; Carboniferous; Kuznets Basin, Russia.

AMMATOPSIS Zalesky, 1937.

Ammatopsis mira Zalesky, 1937b, p. 78, fig. 44; shoot bearing long slender leaves, Coniferales; Permian; Russia.

AMOMOCARPUM Brongniart, 1828.

Amomocarpum depressum Brongniart, 1828b, p. 137. Apparently first illustrated species is *Amomocarpum affine* Sahni, 1938, p. 67, 99, figs. 6, 7.

AMOMOPHYLLUM Watelet, 1866.

Amomophyllum tenua Watelet, 1866, p. 73, pl. 17, figs. 3, 4; leaf fragments, Zingiberaceae?; Tertiary; Vervins, France.

AMPELOCISSITES E. W. Berry, 1929.

Ampelocissites lytlensis E. W. Berry, 1929a, p. 39, fig. 1; seed, Vitaceae; Wilcox group, Eocene; near Lytle, Atascosa County, Tex.

AMPELOPHYLLITES Knowlton, 1919.

Ampelophyllites attenuatus (Lesquereux) Knowlton, 1919, p. 67. For *Ampelophyllum attenuatum* Lesquereux, 1876b, p. 396. See also Lesquereux, 1876a, p. 354, pl. 2, fig. 3.

AMPELOPHYLLUM Massalongo, 1859.

Ampelophyllum nocticum Massalongo, 1859a, p. 89, pl. 37, figs. 1, 2; leaf and infructescence, Vitaceae; Eocene; Italy.

AMPELOPHYLLUM Lesquereux, 1876.

Ampelophyllum firmus Lesquereux, 1876b, p. 396; leaf; Cretaceous.

AMPELOXYLON Fliche, 1899.

Ampeloxylon cineritarum Fliche, 1899a, p. 321; wood; Pliocene; Pas de la Mougudo, France. See also Laurent, 1905, p. 210, pl. 17, fig. 11.

AMPHIBENNETITES Fliche, 1896.

Amphibennetites bleicheri Fliche, 1896, p. 163, pl. 14, fig. 1; pl. 5, fig. 2; cycadophyte cone; Cretaceous (Albien); Revigny, France. See also Seward, 1917, p. 418.

AMPHIBRYOPHYLLUM Debey, 1881.

Amphibryophyllum carinatum Debey, in Murlon, 1881, p. 133; nom. nud.

AMPHITOA Pomel, 1849.

Amphitoea ambigua (Brongniart) Pomel, 1849, p. 353. For *Culmites ambiguus* Brongniart, in Cuvier and Brongniart, 1822, p. 558, pl. 8, fig. 6; Eocene; Grignon, France.

AMPHITOITES Desmarest, 1822.

Amphitoites parisiensis Desmarest, in Cuvier and Brongniart, 1822, p. 234, pl. 8, fig. 10.

AMPHORIDIUM Massalongo, 1852.

Amphoridium baldense Massalongo, 1852b, p. 177, figs. 1-5 [unnumbered plate]; lichen?; Jurassic; Monte Baldi, Italy.

AMPHORISPERMUM Harris, 1932.

Amphorispermum ellipticum Harris, 1932b, p. 15, fig. 4; seed, Caytoniales; *Lepidopteris* bed, Rhaetic; Scoresby Sound, east Greenland.

AMYDROSTROBUS Harris, 1935.

Amydrostrobos groenlandicus Harris, 1935, p. 148, pl. 29; male cone, some resemblance to *Pinus*; *Dictyophyllum* bed, *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

AMYELON Williamson, 1874.

Amyelon radicans Williamson, 1874b, p. 67-68, pl. 7, fig. 46; pls. 8, 9; root, Cordaitales; Carboniferous; England. Williamson (1872, p. 436) introduced name *Amyelon* but no specific designa-

tion; in this reference he refers the fossil previously described by himself as *Dictyoxylon radicans* to *Amyelon*.

AMYLOXYLON Hartig, 1848.

Amyloxylon huttonii Hartig, 1848a, p. 170; wood; Tertiary; Germany.

AMYLOXYLUM.

In Post and Kuntze, 1904, for *Amyloxylon* Hartig.

ANABACAULUS Emmons, 1857.

Anabacaulus duplicatus Emmons, 1857, p. 26, fig. 6; Permian (?); Chatham County, N. C.

ANABARA Vologdin, Chernyshev, Kiparisova, 1937.

Anabara plana Vologdin, Chernyshev, and Kiparisova. This reference not checked; reported by J. H. Johnson, 1943, as follows: Vologdin, A., Chernyshev, B. B., and Kiparisova, D. D., Palaeontology of the Soviet Arctic: Arctic Inst. Trans., v. 91, p. 1-255; alga; Silurian; Soviet Arctic.

ANABATHRA Witham, 1833.

Anabathra pulcherrima Witham, 1833, pl. 8, figs. 7-12, pl. 16, fig. 7; Allenbank, Berwickshire, Scotland.

ANACARDIOPHYLLUM Ettingshausen, 1870.

Anacardiophyllum dubium Ettingshausen, 1870a, p. 90; leaf, Anacardiaceae; Miocene; Moskenberg, Styria.

ANACARDIOXYLON Felix, 1882.

Anacardioxylon spondiaeforme Felix, 1882a, p. 70; Tertiary; Antiqua, West Indies. See also Felix, 1883a, p. 16, pl. 2, figs. 7, 9.

ANACARDITES Saporta, 1861.

Anacardites spectabilis Saporta, in Heer, 1861, p. 149; leaf, Anacardiaceae; Tertiary. First illustrated species: *Anacardites alnifolius* Saporta, 1862, p. 201, pl. 2, fig. 1.

ANACHOROPTERIS Corda, 1845.

Anachoropteris pulchra Corda, 1845, p. 86, pl. 56; petiole with involuted vascular strand; Upper Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

ANARTHROCANNA Goeppert, 1845.

Anarthrocanna deliquescentis Goeppert, 1845, p. 379, pl. 25; Upper Carboniferous; village of d'Afonino, Siberia.

ANCHICODIUM J. H. Johnson, 1946.

Anchicodium funile J. H. Johnson, 1946, p. 1100, pl. 2, fig. 8; pl. 3, fig. 4; pl. 7, fig. 1; alga, Codiaceae; Wakarusa limestone and Auburn shale of Kansas usage, Pennsylvanian; Kansas.

ANCISTROPHYLLUM Goeppert, 1841.

Ancistrophyllum stigmataeforme Goeppert, 1841 (1841c-46), p. 67, pl. 17, figs. 1-3; *Lonchopteris*-like foliage; Devonian; Landshut, Silesia.

ANDRIANIA Braun, 1843.

Andriania baruthina Braun, in Münster, 1843, p. 45, pl. 9, figs. 1, 2; Lower Lias (Lower Jurassic); Theta near Bayreuth, Bavaria. *Andriania polycarpa* Braun, 1840, p. 101; nom. nud.

ANDROLEPIS Nathorst, 1902.

Androlepis ambigua Nathorst, 1902b, p. 6, pl. 1, figs. 12, 13; fragment of cycadophyte microsporophyll; Rhaetic; Palsjo, Sweden.

ANDROMEDITES Ettingshausen, 1851.

Andromedites paradoxus Ettingshausen, 1851, p. 19, pl. 3, fig. 10; leaf, Ericaceae; Tertiary; Vindobonam, Austria.

ANDROSTACHYS Grand'Eury, 1877.

Androstachys frondosus Grand'Eury, 1877, pl. 17, fig. 3. [This generic name is apparently a mistake for *Schizostachys*. The binomial *Schizostachys frondosus* Grand'Eury appears in the text, p. 201, and refers to the figure noted above. See discussion by Schopf, 1948, p. 687.]

ANDROSTROBUS Schimper, 1870.

Androstrobus zamioideus Saporta, in Schimper, 1870 (1869-74) p. 199, pl. 72, figs. 1-3; cycad cone similar to *Dioon* and *Zamia*; Jurassic (Bathonian); Étrocney, France.

ANDROVETTIA Hollick and Jeffrey, 1909.

Androvettia statenensis Hollick and Jeffrey, 1909, p. 22, pls. 3, 7, 28, 29; coniferous "leaves"; Cretaceous; Kreischerville, Staten Island, N. Y.

ANEIMIDIUM Schimper, 1869.

Aneimidium mantelli (Dunker) Schimper, 1869 (1869-74), p. 486, pl. 31, fig. 13; fern frond fragments, supposed similarity to *Aneimia*; Wealden; Borgloh, northern Germany.

ANEIMITES (Dawson) Ettingshausen, 1865.

Aneimites obtusolobus (Naumann) Ettingshausen, 1865, p. 249. For *Odonopteris obtusiloba* Naumann, in Geinitz and Gutbier, 1849 (1848-49), p. 14, pl. 8, figs. 9-11. [The generic name originally suggested by Dawson, *Aneimites acadica* Dawson, 1860, p. 461, but used as a subgenus.]

ANEUROPHYTON Kräusel and Weyland, 1923.

Aneurophyton germanicum Kräusel and Weyland, 1923, p. 172, pl. 7, figs. 4-7; pl. 8, figs. 6-13; pl. 9, figs. 14-19; Psilophytales; Devonian; Germany.

ANGARIDIUM Zalesky, 1933.

Angaridium bardense Zalesky, 1933a, figs. 4-6; ginkgophyte? foliage; Permian; Kroutaia Katouchka, Russia.

ANGARODENDRON Zalesky, 1918.

Angarodendron obrutchevi Zalesky, 1918, p. 54, pl. 13, fig. 5; pl. 62; pl. 63; lycopod? stem impression; Carboniferous; Bedoby village; Kirghises Steppes, Russia.

ANGAROPTERIDIUM Zalesky, 1937.

Angaropteridium cardiopteroides (Schmalhausen) Zalesky, in Tchirkova, 1937, p. 218, figs. 10-15; fernlike pinnules; Permian; Petite Boukon, Russia. [The generic name previously mentioned, Zalesky, 1930b, p. 218; nom. nud.]

ANGAROPTERIS Chachlow and Pollak, 1936.

Neues Jahrb., 1936, Beil.-Band 76, Abt. B, p. 334; Pteridospermae; Permian (not seen). See also Gothan, 1942b, p. 105.

ANGIODENDRON Eichwald, 1860.

Angiodendron orientale Eichwald, 1860, p. 263, pl. 19, fig. 9; stem cast, incertae sedis; Carboniferous; Kaschkabash, near Artinsk, Russia.

ANGIOPTERIDIUM Schimper, 1869.

Angiopteridium muensteri (Goeppert) Schimper, 1869 (1869-74), p. 603, pl. 35, figs. 1-6; fern leaf, Marattiaceae; Rhaetic; Bayreuth and Bamberg, Bavaria; Steierdorf, Hungary. See note under *Marattiopsis*.

ANGIOSPERMOPHYTON Hoskins, 1923.

Angiospermophyton americanum Hoskins, 1923, p. 397, figs. 1-13; petrified medullous petiole; Coal No. 5, Pennsylvanian; Harrisburg, Ill.

ANGIOTHECA Schimper, 1879.

Angiotheca angiotheca (Grand'Eury) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66.

ANISOPHYLLUM Lesquereux, 1874.

Anisophyllum semialatum Lesquereux, 1874, p. 98, pl. 6, figs. 1-5; leaf, dicotyledon; Cretaceous; near Beatrice, Gage County, Nebr.

ANKYROPTERIS Stenzel, 1889.

Ankyropteris brongniarti (Renault) Stenzel, 1889, p. 29; coenopterid fern; Permian; Autun, France. For *Zygopteris brongniarti* Renault, 1869, p. 164, pls. 3-6. See also Renault, 1883, p. 101, pl. 16, fig. 1; and Posthumus, 1931.

ANNALEPIS Fliche, 1910.

Annalepis zeilleri Fliche, 1910, p. 272, pl. 27, figs. 3-5; lycopod cone scales?; Triassic; Meurthe-et-Moselle, Vosges, France.

ANNONOXYLON Bureau, 1950.

Annonoxylon striatum Bureau, 1950b, p. 393, pl. 21, figs. 1, 2; Eocene; Sahara, Africa.

ANNULARIA Sternberg, 1822.

Annularia spinulosa Sternberg, 1822 (1820-38), p. 32, pl. 19, fig. 4; articulate stem with foliage; Carboniferous.

ANNULARIOPSIS Zeiller, 1903.

Annulariopsis inopinata Zeiller, 1903, p. 132, pl. 35, figs. 2-7; *Annularia*-like foliage; Carboniferous; Tonkin and numerous other localities, see p. 137.

ANNULARITES Halle, 1927.

Annularites ensifolius Halle, 1927, p. 19, pls. 1-4; foliage, Equisetales; Upper Shihhotse series, Permian; central Shansi, China.

ANOECTOMERIA Saporta, 1865.

Anoectomeria brongniartii Saporta, 1865, p. 125, pl. 7, fig. 1; rhizome?, Nymphaeaceae; Tertiary; St.-Jean-de-Garguer, France.

ANOMALOFILICITES Hollick, 1916.

Anomalofilicites monstrosus Hollick, 1916, p. 474, pl. 31; fern frond with abnormal pinnae; Fort Union formation, Eocene; Kern Ranch, Dawson County, Mont.

ANOMALOPHYCUS Fenton and Fenton, 1937.

Anomalophycus compactus Fenton and Fenton, 1937, p. 438, pl. 3, figs. 1, 2; calcareous alga; Allentown formation, Cambrian; Portland, Northampton County, Pa.

ANOMALOPHYLLITES Watelet, 1866.

Anomalophyllites tricarinatus Watelet, 1866, p. 100, pl. 28, fig. 105; leaf fragments, Palmaceae?; Tertiary; Belleu, France.

ANOMALOXYLON Felix, 1887.

Anomaloxylon vicentinum Felix, 1887a, p. 527, pl. 25, fig. 8; wood; Tertiary; Monte Grumi near Castelgomberto, Italy.

ANOMALOXYLON Gothan, 1910.

Anomaloxylon magnoradiatum Gothan, 1910, p. 11, pl. 1, fig. 9-11; pl. 2, figs. 2, 3; coniferous wood; Jurassic; Green Harbor, Spitzbergen.

ANOMASPIS Hollick and Jeffrey, 1909.

Anomaspis tuberculata Hollick and Jeffrey, 1909, p. 49, pls. 10, 25, 26; coniferous cone scales; Cretaceous; Kreischer-ville, Staten Island, N. Y.

ANOMOPTERIS Brongniart, 1828.

Anomopteris mougeotii Brongniart, 1828b, p. 69; fern foliage. See also Brongniart, 1832 (1828a-38), p. 258, pls. 79-81.

ANOMORRHOEA Eichwald, 1844.

Anomorrhoa fischeri Eichwald, 1844, p. 144; stem, Osmundaceae; Permian (Zechstein); Orenbourg, Russia. See also Eichwald, 1860 (1860-68), p. 102, pl. 4, figs. 3, 4; Kidston and Gwynne-Vaughan, 1908, p. 216; Posthumus, 1931.

ANOMOZAMITES Schimper, 1870.

Anomozamites inconstans (Goeppert) Schimper, 1870 (1869-74), p. 140; cycadophyte foliage; Rhaetic; Bayreuth Bavaria. For *Pterophyllum inconstans* Goeppert; first? illustration in Schenk, 1867 (1865-67), p. 171, pl. 37, figs. 5-9.

ANONASPERMUM Ball, 1931.

Anonaspermum reidi Ball, 1931, p. 121, pl. 20, figs. 5, 9, 11, 13; seeds, Anonaceae; Yegua formation, Eocene; Turkey Creek, Brazos County, Tex.

ANOTOPTERIS Schimper, 1869.

Anopteris distans (Presl) Schimper, 1869 (1869-74), p. 471, pl. 33, figs. 1, 2; fern foliage; Triassic (Keuper); Stuttgart.

ANTARCTICOXYLON Seward, 1914.

Antarcticoxylon priestleyi Seward, 1914, p. 17, pls. 4-8; gymnosperm stem; Priestley glacier, Antarctica.

ANTEVZIA Harris, 1937.

Antevsia zeileri (Nathorst) Harris, 1937, p. 35; pteridosperm microsporangiate organ; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland. For *Antholithus zeileri* Nathorst, 1908c, p. 20, pl. 2, figs. 59, 60; pl. 4.

ANTHERANGIOPSIS Nathorst, 1902.

Antherangiopsis rediviva Nathorst, 1902b, p. 20, pl. 1, figs. 22, 23; cycadophyte microsporophylls; Rhaetic; Bjuf, Sweden.

ANTHICOCCLADUS Zalesky, 1937.

Anthicocladus fimbriatus Zalesky, 1937b, p. 81, fig. 48; pteridosperm male inflorescence?; Permian; Matveyevo, USSR.

ANTHITES Schimper, 1874.

Anthites gaudini (Heer) Schimper, 1874, p. 419; flower, dicotyledon; Tertiary; near Lausanne, France.

ANTHOCARPUS Grand'Eury, 1877.

Anthocarpus botryoides Grand'Eury, 1877, p. 521; nom. nud.

ANTHOCEPHALE Bayer, 1893.

Anthocephale bohémica Bayer, in Fric, 1893, p. 132, fig. 193; Cretaceous (Senonian); Priessen, Bohemia.

ANTHODIOPSIS Goeppert, 1864.

Anthodiopsis beinertiana Goeppert, 1864, p. 85; Upper Carboniferous; Silesia? See also Goeppert, in Quenstedt, 1867, p. 912, pl. 86, fig. 57.

ANTHOLITHES Brongniart, 1822.

Antholithes liliacea Brongniart, 1822, p. 320, pl. 14, fig. 7; a small "bud-like" impression showing no fertile parts and of unknown affinity. A "type" species here seems to be of little significance because of the wide diversity of fossils assigned to the genus. For example, compare *Antholithus noeggerathi* Renault, in Renault and Zeiller, 1888, p. 593, pl. 67, fig. 6; *Antholithes amissus* Heer, 1868, p. 139, pl. 23, fig. 12; *Antholithus arberi* Thomas, 1925, p. 327, pl. 14, figs. 33-40.

ANTHOLITHUS.

See *Antholithes* Brongniart.

- ANTHOMYCES** Gruss, 1930.
Wochenschr. Braueri, 1930, Band 42, p. 15; fungus; Tertiary (not seen).
See also Gothan, 1942b, p. 105.
- ANTHOPHYCUS** Piedboeuf, 1887.
Anthophycus dechenianus (Goeppert) Piedboeuf, 1887, p. 56, pl. 3.
- ANTHOPHYLLITES**.
Anthophyllites devonicus (probably error for *Antholithes devonicus* Dawson), in Le Conte, 1882, p. 330, fig. 385.
- ANTHOTYPOLITHES** Schlothheim, 1820.
Anthotypolites ranunculiformis Schlothheim, 1820, p. 423; described as ranunculaceous flower?; Permian; Frankenberg, Hesse.
- ANTHRACOHONDRUS** Kušta, 1898.
Anthracohondrus nyranensis Kušta, 1898, p. 220; Permian; Nyran, Bohemia.
See also Kušta, in Ryba, 1904, p. 352, pl. 17, figs. 1, 2.
- ANTHRACOMYCES** Renault, 1898.
Anthracomyces cannellenensis Renault, 1898, p. 205, figs. 1-3; fungus mycelium? in cannel coal; Carboniferous; several localities cited.
- ANTHRACOPORELLA** Pia, 1920.
Anthracoporella spectabilis Pia, 1920, p. 15, pl. 1, figs. 7-11; alga, Siphonaceae Verticillatae; Carboniferous.
- ANTHROPHYOPSIS** Nathorst, 1878.
Anthrophyopsis nilssoni Nathorst, 1878a, p. 43, pl. 7, fig. 5; pl. 8, fig. 6; cycadophyte leaf fragment; Rhætic; Bjuf, Sweden.
- APACHEA** Daugherty, 1941.
Apachea arizonica Daugherty, 1941, p. 55, pl. 9, fig. 2; sterile frond, Dipteridaceae; Chinle formation, Upper Triassic; Arizona.
- APALOXYLON** Renault, 1892.
Apaloxylon rochei Renault, 1892a, p. 157, pl. 5; cordaitan stem; Carboniferous; Autun, France.
- APEIBOPSIS** Heer, 1859.
Apeibopsis gaudini Heer, 1859, p. 40, pl. 118, figs. 24-26; fruits, Tiliaceae; Tertiary; Lausanne, Switzerland.
- APLEBIA** Presl, 1838.
Aplebia acuta (Germar and Kaulfuss) Presl, in Sternberg, 1838 (1820-38), p. 112. For *Fucoides acutus* Germar and Kaulfuss, 1831, p. 230, pl. 66, fig. 7; Carboniferous; Germany.
- APHLEBIOCARPUS** Stur, 1877.
Aphlebiocarpus schutzei Stur, 1877, p. 304, pl. 27, figs. 1-6; fern foliage with associated sporangia; Lower Carboniferous (Culm); Altwasser, Silesia.
- APHLEBIOPTERIS** Gothan, and Zimmerman, 1932.
Aphlebiopteris boegendorffiana Gothan and Zimmerman, 1932, p. 107, pl. 15, fig. 1; Upper Devonian; Upper Bögendorf, Silesia.
- APHRALYSIA** Garwood, 1914.
Aphralysia carbonaria Garwood, 1914, p. 269, pl. 21, figs. 3, 4; rock-building alga; Lower Carboniferous; Ravenstone-dale, Westmoreland, England.
- APHYLLOPTERIS** (Nathorst) Arnold, 1939.
Aphylopteris delawarensis Arnold, 1939, p. 292, pl. 10, figs. 2, 3; incertae sedis, Devonian; 4 miles north of Port Jervis, N. Y.
Aphylopteris sp. Nathorst, 1915, p. 14, pls. 4, 5, 7.
- APHYLLOSTACHYS** Goeppert, 1865.
Aphylostachys jugleriana Goeppert, 1865a, p. 14, pl. 1; articulate cone infructescence; Lower Jurassic (Lias); Hannover, Germany.
- APHYLLUM** Artis, 1825.
Aphyllum cristatum Artis, 1825, p. 16, pl. 16; lycopod stem impression; Carboniferous; Banktop, Yorkshire, England.
- APHYLLUM** Unger, 1856.
Aphyllum paradoxum Unger, 1856, p. 175, pl. 11, figs. 1-4; incertae sedis; Upper Devonian; Saalfeld, Thuringia. Earlier citation: Unger, 1854, p. 599; nom. nud.
- APICULATASPORITES** Ibrahim, 1933.
Apiculatasporites spinulistratus Loose, in Ibrahim, 1933, p. 37. No figures given; Ibrahim refers to Neues Jahrb, 1932, Beil.-Band 67, Abt. B, p. 451, pl. 18.
- APICULATISPORITES** Ibrahim, 1933.
Apiculatisporites aculeatus Ibrahim, 1933, p. 23, pl. 6, fig. 57; spore; Carboniferous. [Generic concept based on *Triletes* VI in Bennie and Kidston, 1886, p. 109, pl. 3, figs. 6a-c.]
- APIDIUM** Stolley, 1896.
Apidium kräusei (Kiesow) Stolley, 1896, p. 261, figs. 46, 99.
- APLOPHLEBIS** (Brongniart) Meneghini, 1857.
Aplophlebis arborescens (Schlothheim) Meneghini, 1857, p. 108, pl. D, fig. V5.
- APLUDOPHYTON** Massalongo, 1859.
Apludophyton scleroides Massalongo, 1859b, p. 22; nom. nud.
- APOCINOPHYLLUM**.
See *Apocynophyllum* Unger.
- APOCYNOCARPUM** Ettingshausen, 1887.
Apocynocarpum sulcatum Ettingshausen, 1887, p. 119, pl. 13, fig. 11; Apocynaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

APOCYNOPHYLLUM Unger, 1850.

Apocynophyllum scyfriedii Braun, in Unger, 1850a, p. 433. Apparently first illustrated species is *Apocynophyllum lanceolatum* Unger, 1850b, p. 125, pl. 14, fig. 14; leaf, Apocynaceae; Miocene; Radoboj, Croatia. Cited earlier as *Apocynophyllum*, Unger, 1845, p. 230; nom. nud.

APOCYNOSPERMUM Reid and Chandler, 1926.

Apocynospermum striatum Reid and Chandler, 1926, p. 118, pl. 8, fig. 3; seed, Apocynaceae; Bembridge beds, lower Oligocene; Isle of Wight, England.

APOROXYLON Unger, 1856.

Aporoxylon primigenium Unger, 1856, p. 181, pl. 13, figs. 3-11; stem of cordatean? affinities; Upper Devonian; Saalfeld, Thuringia. [Binominal first cited in Unger, 1854; nom. nud.]

APTERALETES Zalesky, 1939.

Apteraletes Zalesky, 1939a, p. 326; nom. nud.

APTEROMONOLETES Zalesky, 1939

Apteromonoteles Zalesky, 1939a, p. 326; nom. nud.

APTEROSTROBUS Gothan and Nagel, 1921.

Apterostrubus cedroides Gothan and Nagel, 1921, p. 131, pl. 8; cone; Coniferales; Eocene.

APTEROTRILETES Zalesky, 1939.

Apterotriletes Zalesky, 1939a, p. 326; nom. nud.

APTIANA Stopes, 1912.

Aptiana radiata Stopes, 1912, p. 84, pls. 6-8; wood, numerous suggestions as to affinity, see Edwards, 1931, p. 20; Lower Cretaceous (Aptian); Isle of Wight, England.

ARACEAEITES Fritel, 1910.

Araceaeites parisiense Fritel, 1910, p. 29, pl. 22, fig. 1; spadix, Araceae?; Paleocene; Meudon, Vanves, France.

ARACEOPHYLLUM Kräusel, 1929.

Araceophyllum engleri Kräusel, 1929, p. 13, pl. 4, figs. 3, 4; leaf fragment; Araceae; Tertiary (Pliocene?); Sungai Tjaban, South Sumatra.

ARACHNOXYLON Read, 1938.

Arachnoxyylon kopfi (Arnold) Read, 1938, p. 602, figs. 4, 5; petrified stem, Psilophytales; Tully pyrites, Devonian; 1 mile east of Gooding's Landing, Canandaigua Lake, N. Y.

ARAEIS Stenzel, 1872.

Araeis axonensis (Watelet) Stenzel, 1872, p. 71. For *Palmacites axonensis* Watelet, 1866, p. 103, pl. 30, fig. 3; Eocene; Quincy-sous-le-Mont, France.

ARALIACEA Velenovsky, 1882.

Araliacea propinqua Velenovsky, 1882, p. 217; nom. nud.

ARALIACITES Saporta, 1865.

Araliacites cordatus Saporta, 1865, p. 48; leaf, Araliaceae; Tertiary; France.

ARALIAECARPUM Menzel, 1913.

K. preuss. geol. Landesant., Jahrb., 1913, Band 34, p. 9, pl. 1, fig. 19; Araliaceae; lower Miocene (not seen). See also Gothan, 1942b, p. 106.

ARALIAEPHYLLUM Fontaine, 1889.

Araliaephyllum obtusilobum Fontaine, 1889, p. 317, pl. 163, figs. 1, 4; pl. 164, fig. 3; leaf; Potomac group, Lower Cretaceous; near Brooke, Va.

ARALIANTHEA Massalongo, 1893.

Aralianthea brongniarti Massalongo, in Meschinelli and Squinabol, 1893, p. 403. For *Fucoides obtusus* Brongniart, 1828a-38, p. 60, pl. 8, fig. 4; inflorescence, Araliaceae; Eocene; Monte Bolca, Italy. [Name given previously as *Aralianthea brongniarti* Massalongo, 1857b, p. 777, nom. nud.]

ARALINIUM Platen, 1908.

Aralinium excellens Platen, 1908, p. 59; wood, early Tertiary; California.

ARALIOPHYLLUM Ettingshausen, 1868.

Araliophyllum dubium Ettingshausen, 1868b, p. 867. For *Quinquefolium* sp. Ludwig, 1859, p. 145, pl. 58, fig. 8; leaf, dicotyledon?; Miocene; Muenzenberg, Hesse. [Unger, 1865 (1860-65), p. 72, refers to *Araliophyllum denticulatum* Ettingshausen but apparently the name had not been published.]

ARALIOPSIS Saporta and Marion, 1878.

Araliopsis cretacea (Newberry) Saporta and Marion, 1878, p. 78. For *Sassafras cretaceum* Newberry, in Dana, 1863, p. 471, fig. 746; see also Lesquereux, 1874, pl. 11, figs. 1, 2; pl. 12, fig. 2; leaf, Araliaceae; Cretaceous; Blackbend Hills, Nebr.

ARALIOPSIS E. W. Berry, 1911.

Araliopsis cretacea (Newberry) E. W. Berry, 1911b, p. 413; leaf, compared with modern *Sassafras*; Upper Cretaceous; Bull Mountain, Cecil County, Md.

ARALIOPSOIDES E. W. Berry, 1916.

Araliopsoides breviloba E. W. Berry, 1916a, p. 878, pl. 86, fig. 2; leaf, Araliaceae; Raritan formation, Upper Cretaceous; Bull Mountain, Cecil County, Md.

ARALIPHYLLUM Nathorst, 1888.

Araliphyllum raumannii Nathorst, 1888, p. 219, pl. 20, fig. 10; leaf, dicotyledon; Miocene; Miogamura, Iyo province, Japan.

ARALITES Goeppert, 1854.

Aralites lanccus Goeppert, 1854, p. 130; Miocene; Bodenheim, Hesse; nom. nud.

ARANETZIA Zalesky, 1934.

Aranetzia splendens Zalesky, 1934b, p. 271, figs. 46-48; sphenopterid foliage; Permian; Pechora [Petchora] basin, Russia.

ARAUCARIOCAULON Lignier, 1907.

Araucariocaulon breveradiatum Lignier, 1907, p. 290, fig. 2; petrified stem, compared with *Araucarioxylon*; Upper Cretaceous (Cenomanian); Dives, France.

ARAUCARIOPHLOIOS Lignier, 1907.

Araucariophloios breveradiatum Lignier, 1907, p. 291. For *Araucariocaulon breveradiatum* Lignier, 1907, p. 290, pl. 19, figs. 33-43.

ARAUCARIOPIITYS Jeffrey, 1907.

Araucariopitys americana Jeffrey, 1907, p. 435, pls. 28-30; araucarian wood; Cretaceous; Staten Island, N. Y.

ARAUCARIOPSIS Caspary, 1888.

Araucariopsis macractis Caspary, 1888, p. 45. For illustrations, see Caspary, 1889, p. 193, pl. 14, figs. 16-20.

ARAUCARIOSTROBUS Krasser, 1921.

Araucariostrobus mandlii Krasser, 1921b, p. 221; Jurassic; Nokolsk-Ussuryrk, Russia.

ARAUCARIOXYLON Kraus, 1870.

Araucarioxylon carbonaceum (Witham) Kraus, in Schimper, 1870 (1869-74), p. 381. For *Pinites carbonaceus* Witham, 1833, p. 73, pl. 11, figs. 6-9; Carboniferous; England.

ARAUCARITES Presl, 1838.

Araucarites goepperti Presl, in Sternberg, 1838 (1820-38), p. 204, pl. 39, fig. 4; cone, Coniferales; Tertiary?; Tirol.

ARBERIA David White, 1908.

Arberia minasica David White, 1908, p. 537, pl. 8, figs. 8-10; regarded as inflorescence of *Gangamopteris*; "Permian-Carboniferous"; near Minas, Santa Catharina, Brazil. [This binomial previously published as *Arberia minasica* I. C. White, 1906, p. 379; nom. nud.]

ARBUTITES Ettingshausen, 1868.

Arbutites euri Ettingshausen, 1868a, p. 236, pl. 39, fig. 14; leaf, Ericaceae; Miocene; Priesen, Bohemia.

ARCELLITES Miner, 1935.

Arcellites disciformis Miner, 1935, p. 600, pl. 20, figs. 61, 64-66; incertae sedis; Upper Cretaceous; Skansen, Disko Island, Greenland.

ARCHAEOCALAMITES Stur, 1875.

Archaeocalamites radiatus (Brongniart) Stur, 1875, p. 2, pl. 1, figs. 3-8; pls. 2-4; pl. 5, figs. 1, 2; articulate stems bearing filiform dichotomous leaves; Carboniferous (Culm); Altendorf, Mohr-adorf, Germany.

ARCHAEOOLITHOTHAMNIUM Rothpletz, 1891.

Archaeolithothamnium nummuliticum (Gümbel) Rothpletz, 1891, p. 316, pl. 17, fig. 5; alga, Corallinaceae; Eocene. Correct genotype?

ARCHAEOMNIUM Britton, 1926.

Archaeomnium patens Britton, in Knowlton, 1926, p. 24, pl. 8, figs. 1, 2; moss, Mnaceae; Latah formation, Miocene; Spokane, Wash.

ARCHAEOPHYTON Britton, 1888.

Archaeophyton newberryanum Britton, 1888a, p. 89; plant?; Archaean; Sussex County, N. J. For full description, see Britton, 1888b, p. 123.

ARCHAEOPITYS Scott and Jeffrey, 1914.

Archaeopitys eastmanii Scott and Jeffrey, 1914, p. 345, pl. 38, figs. 17-19; petrified cordaitan stem; base of Waverley shale, Mississippian; Kentucky.

ARCHAEOPODOCARPUS Weigelt, 1930.

Archaeopodocarpus germanicus Weigelt, 1930, p. 269, pl. 1, figs. 2-7; pl. 3, fig. 1.

ARCHAEOPTERIDIUM Kidston, 1923.

Archaeopteridium tschermaki (Stur) Kidston, 1923a, p. 182, pls. 40, 41, 43; foliage of *Archaeopteris* type; Oil Shale group, Carboniferous Limestone, Lower Carboniferous; Scotland.

ARCHAEOPTERIS Dawson, 1871.

Archaeopteris hibernica (Forbes) Dawson, 1871, p. 48; "fern," at least one species of which has been demonstrated to be heterosporous; see Arnold, 1939; Devonian. For *Cyclopteris hibernica* Forbes, in Murchison, 1854, p. 255, fig. 51.

ARCHAEORRHIZA Torell, 1869.

Archaeorrhiza tuberosa Torell, 1869, p. 7; Cambrian; Lugnas, Sweden.

ARCHAEOSIGILLARIA Kidston, 1901.

Archaeosigillaria vanuxemi (Goeppert) Kidston, 1901, p. 39; sigillarian stem, said to lack lateral parichnos scar; Carboniferous. For *Sigillaria vanuxemi* Goeppert, 1852b, p. 249. For illustration, see Dawson, 1862, p. 307, pl. 12, fig. 7; and Kidston in Linnean Soc. London Jour., Botany, 1886, v. 21, p. 560, pl. 18.

ARCHAEOSIGILLARIOPSIS Gothan, 1928.

Archaeosigillariopsis serotina Gothan, 1928a, p. 1, pl. 1, figs. 1-4; pl. 2; lycopod stem impression; Carboniferous; Flöha, Saxony.

ARCHAEOTHRIX Kidston and Lang, 1921.

Archaeothrix oscillatoriformis Kidston and Lang, 1921, p. 875, pl. 8, figs. 89, 90; slender unbranched filaments, Cyanophyceae?; Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

ARCHAEOXYLON Kräusel, 1924.

Archaeoxylon krasseri Kräusel, 1924, p. 31, pl. 2; fragment of pteridophyte? stem showing cells with bordered pits; pre-Cambrian?; Bohemia.

ARCHAEOZOON Matthew, 1890.

Archaeozoon acadense Matthew, 1890b, p. 67; plant?; Laurentian; Green Head, St. John, New Brunswick, Canada.

ARCHAGARICON Hancock and Atthey, 1869.

Archagaricon bulbosum Hancock and Atthey, 1869, p. 226, pl. 10; fungus; Cramlington Black Shale, Upper Carboniferous; Cramlington, Newsham, Northumberland, England.

ARCHAMPHIROA Steinmann, 1926.

Archamphiroa jurassica Steinmann, in Jaworski, 1926, p. 139, figs. 1a, b; alga; Jurassic; Arroyo Negro, Argentina.

ARCHIHICORIA Barbour, 1898.

Archihicoria siouxensis Barbour, 1898, p. 272, pl. 5; petrified kernel of fruit, compared with *Hicoria*; Miocene; Badlands of Hat Creek basin, Sioux County, Nebr.

ARCTOBAIERA Florin, 1936.

Arctobaiera flettii Florin, 1936b, p. 119, pls. 26-31; pl. 32, figs. 1-6; structurally preserved ginkgophyte foliage; Jurassic; Franz Joseph Land.

ARCTODENDRON Nathorst, 1919.

Arctodendron kidstonii Nathorst, 1919, p. 457. For *Dictyodendron kidstonii* Nathorst, 1914, p. 72, pl. 8, figs. 1-4; pl. 9, figs. 1-8; pl. 12, figs. 11-20; pl. 13, figs. 32-36.

ARCTOPODIUM Unger, 1856.

Arctopodium insigne Unger, 1856, p. 177, pl. 12, figs. 1, 2; regarded as identical with *Cladoxylon* (see discussion in Seward, 1917, p. 200); Upper Devonian; Saalfeld, Thuringia. See also *Posthumus*, 1931.

ARCTOSTAPHYLOIDES Kirchheimer, 1936.

Arctostaphyloides globula (Menzel) Kirchheimer, 1936b, p. 117, pl. 12, figs. 12a-g; fruit, Ericaceae; Tertiary (Braunkohle); Salzhausen, Germany.

ARCTOXYLON Kräusel, 1949.

Arctoxylon magnoradiatum (Gothan) Kräusel, 1949, p. 112, 186; coniferous wood; Lower Cretaceous or Jurassic.

ARCYOPTERIS Zalesky, 1936.

Arcyopteris asiatica Zalesky, 1936a, p. 224, fig. 1; fern or pteridosperm; foliage; Carboniferous; Russia.

ARDISIOPHYLLUM Geyler, 1887.

Ardisiophyllum sp. Geyler, 1887a, p. 497, pl. 36, figs. 1-3; leaf fragments, Myrsinaceae?; Eocene; Labuan, Borneo.

ARECIPITES Wodehouse, 1933.

Arecipites punctatus Wodehouse, 1933, p. 497, fig. 22; pollen, Araceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

ARECITES Squinabol, 1892.

Arecites trabucci Squinabol, 1892, p. 71, pl. 28, fig. 5; leaf, Araceae; Tertiary; Santa Glustina, Italy.

ARECOPSIS Fritel, 1927.

Arecopsis communis Fritel, 1927, p. 118, fig. 1b; Upper Cretaceous; Faveau, Provence, France.

ARGOPHYLLITES Deane, 1902.

Argophyllites levis Deane, 1902a, p. 62, pl. 17, fig. 2; leaf fragment, compared with *Argophyllum*; Tertiary; Wingello, New South Wales.

ARISAEMITES Knowlton, 1896.

Arisaemites sp. Knowlton, in Lindgren, 1896, p. 889; Miocene; Independence Hill, Placer County, Calif.

ARISTOLOCHIAEPHYLLUM Fontaine, 1889.

Aristolochiaephyllum crassinerve Fontaine, 1889, p. 322, pl. 160, figs. 3-6; leaf; Potomac group, Lower Cretaceous; near Brooke, Va.

ARISTOLOCHITES Heer, 1866.

Aristolochites dentata Heer, in Capellini and Heer, 1866, p. 18, pl. 2, figs. 1, 2; Upper Cretaceous; Tekamah, Nebr.

ARISTOLOCHOPSIS Kuntze, 1904.

Aristolochopsis Kuntze, in Post and Kuntze, 1904, p. 44.

ARISTOPHYCOS Massalongo, 1858.

Aristophycos agardhianus Massalongo, 1858b, p. 745; alga; Tertiary; Italy.

ARISTOPHYCUS Miller and Dyer, 1878.

Aristophycus ramosus Miller and Dyer, 1878, p. 4, pl. 4, fig. 2; probably not of plant origin; Cincinnati group, Silurian; Cincinnati, Ohio.

ARNOLDELLA Read, 1936.

Arnoldella minuta Read, 1936a, p. 221, figs. 3, 4; petrified petiole, Pityeae; Upper Devonian; Junction City, Boyle County, Ky.

AROIDES Kutorga, 1838.

Aroides crassipatha Kutorga, 1838, p. 24. See Saporta and Marion, 1885, p. 231, figs. 100b, 100c; seed?; Permian, West Ural Mts., Russia.

ARONITES Heer, 1855.

Aronites dubius Heer, 1855, p. 98, pl. 46, fig. 5; leaf fragment, Araceae?; Tertiary; Switzerland.

ARONIUM Ettingshausen, 1870.

Aronium extinctum Ettingshausen, 1870b, p. 872, pl. 1, fig. 32; root?; Araceae; Miocene; Radoboj, Croatia.

ARPEXYLON Williamson, 1872.

Arpeylon simplex Williamson, 1872, p. 438, fig. 1; coenopterid petiole; Calciferous Sandstone series, Lower Carboniferous; Burntisland, Scotland. See also Hirmer, 1927, p. 495; and Posthumus, 1931.

ARTHRARIA Billings, 1872.

Arthria antiquata Billings, 1872, p. 467, fig. 2; plant?; Silurian; Great Bell Island, Newfoundland, Canada.

ARTHROCLADION Sauveur, 1848.

Arthrocladion rhodii Sauveur, 1848, p. 2, pl. 65; fragment of decorticated stem?; Carboniferous; Belgium; nom. nud.

ARTHRODENDROMYELON Lignier, 1910.

Arthrodendromylon morierei Lignier, 1910a, p. 626; articulate stem cast?; Lower Jurassic (Lias); St.-Honorine-la-Guillaume, France.

ARTHRODENDRON Scott, 1900.

Arthrodendron sp. Scott, 1900b, p. 32. This name, proposed by Scott, was first introduced by Seward, 1898, p. 301, for a calamitean stem described by Williamson, 1871c. Seward, however, used the name as a subgenus.

ARTHRODENDRON Ulrich, 1904.

Arthrodendron diffusum Ulrich, 1904, p. 138, pl. 14, figs. 1-3; alga, possibly related to *Cymopolia* and *Corallina*; Yakutat formation, Lower Jurassic (Lias); Pogibshi Island, opposite village of Kodiak, Alaska.

ARTHROON Renault, 1894.

Arthron rochei Renault, 1894, p. 178; see also Renault, 1896, p. 435, figs. 85, 86; arthropod eggs or possibly of fungus origin?; parasite in *Lepidodendron*; Upper Carboniferous; Esnost and Combres, France.

ARTHROPHYCUS Hall, 1852.

Arthrophycus harlani (Conrad) Hall, 1852, p. 5, pls. 1, 2; incertae sedis, worm tracks?; Medina sandstone, Silurian; Rochester, N. Y.

ARTHROPITYOSTACHYS Renault, 1896.

Arthropityostachys borgiensis Renault, 1896a, p. 133, pl. 61, figs. 1-4; calamitean cone; Upper Carboniferous; Borgis, France.

ARTHROPITYS Goeppert, 1864.

Arthropitys bistriata (Cotta) Goeppert, 1864, p. 185, pls. 32, 33; calamitean stem; Permian; Chemnitz, Germany.

ARTHROPORELLA Stolley, 1893.

Arthroporella catenularia Stolley, 1893, p. 145, pl. 7, figs. 9-10; siphonaceous alga; Upper Silurian; Holstein, Kiel, Prussia.

ARTHROSTIGMA Dawson, 1871.

Arthrostigma gracile Dawson, 1871, p. 41, pl. 13, psilophyte; Devonian; Gaspé, Canada.

ARTHROTAXITES.

See *Athrotaxites* Unger.

ARTHROTAXOPSIS.

Arthrotaxopsis grandis Fontaine; this name given in a list in Allan, Warren, and Rutherford, 1932, p. 243, apparently a mistake for *Athrotaxopsis*.

ARTISIA Sternberg, 1838.

Artisia transversa (Artis) Sternberg, 1838 (1828-38), p. 192, pl. 53, figs. 7-9; cordaitan pith cast; Upper Carboniferous; England. [The binomial *Artisia interrupta* first appears in Anonymous, 1827, p. 134 (this is undoubtedly by Sternberg) and is a name given for *Sternbergia transversa* Artis, 1825, pl. 8.]

ARTOCARPIDIUM Unger, 1851.

Artocarpidium integrifolium Unger, 1851, p. 166, pl. 35, figs. 3, 4; leaf fragment, Artocarpaceae; Tertiary; Sotzka, Styria.

ARTOCARPOIDES Saporta, 1865.

Artocarpoides perampla Saporta, 1865, p. 46. Apparently first illustrated species: *Artocarpoides conocephaloidea* Saporta, 1868, p. 356, pl. 6, fig. 6; leaf, Artocarpaceae; Eocene, Sézanne, France.

ARTOCARPOPHYLLUM Crie, 1889.

Artocarpophyllum damesii Crie, 1889a, p. 90; nom. nud.

ARTOCARPOPHYLLUM Dawson, 1894.

Artocarpophyllum occidentale Dawson, 1894, p. 60, pl. 12, fig. 51; pl. 13, fig. 52; leaf fragment, incertae sedis; Cretaceous; Vancouver Colliery, Nanaimo, Vancouver Island.

ARTOPHYCUS J. H. Johnson, 1940.

Artophycus columnaris J. H. Johnson, 1940, p. 589, pl. 7, fig. 1; alga, probably Cyanophyceae; Weber formation, Pennsylvanian; Trout Creek Pass, Chaffee County, Colo.

ARUNDINARITES Saporta, 1862.

Arundinarites restiaceus Saporta, 1862, p. 296 [142]; Tertiary; France.

ARUNDINITES Otto, 1854.

Arundinites wohlfarthi Otto, 1854 (1852-54), p. 27, pl. 4, fig. 2; pl. 7, figs. 1-5; stem fragments, incertae sedis; Cretaceous (Quadersandstein); Paulsdorf, Saxony.

ASCHEMONIA Dettner, 1915.

Aschemonia gigantea Dettner, 1915, p. 287, fig. p. 285; incertae sedis; Cretaceous (Cenomanian); Weissen Berge, near Prague, Bohemia.

ASCLEPIADITES MacGinitie, 1941.

Asclepiadites laterita MacGinitie, 1941, p. 157, pl. 44, fig. 6; leaf, Asclepiadaceae; Eocene; You Bet, Nevada County, Calif.

ASCOSOMA Lorenz, 1904.

Ascosoma phaneroporata Lorenz, 1904, p. 194; alga, Siphonaceae; Cambrian; Shantung, China.

- ASKISIELLA** Chachlof, 1939.
Askisiella ramosa Chachlof, 1939, p. 91, pls. 1-3; Middle Devonian; Minussinsk Bassin, Russia.
- ASOLANUS** Wood, 1861.
Asolanus ornithicoides Wood, 1861a, p. 238, pl. 4, fig. 1; Pennsylvanian; Milnes mine, St. Clair, Pa.?
- ASOLENOXYLON** Renault, 1883.
Asolenoxylon sp. Renault, 1883b, p. 1019; nom. nud.
- ASPASIA** Stefani, 1901.
Aspasia amplexens Stefani, 1901, p. 75, pl. 11, figs. 1-4; incertae sedis; Lower Permian; Monte Vignale, Italy.
- ASPIDIARIA** Presl, 1838.
Aspidiaria schlotheimiana Presl, in Sternberg, 1838 (1820-38), p. 131, pl. 68, fig. 10; partly decorticated *Lepidodendron*.
- ASPIDIODES** Jaeger, 1827.
Aspidioides stuttgartiensis Jaeger, 1827, p. 32, pl. 8, fig. 1; sterile fern frond; Triassic; Stuttgart, Württemberg.
- ASPIDION** Zalesky, 1937.
Aspidion decemnervium Zalesky, 1937b, p. 80, fig. 46; incertae sedis; Permian; Matveyevo, USSR.
- ASPIDIOPHYLLUM** Lesquereux, 1876.
Aspidiophyllum trilobatum Lesquereux, 1876a, p. 361, pl. 2, figs. 1, 2; leaf, incertae sedis; Cretaceous; south of Fort Harker, Kans.
- ASPIDIOPSIS** Henry Potonie, 1893.
Aspidiopsis coniferoides Henry Potonie, 1893a, p. 242, pl. 1, fig. 8; pl. 26; stem impression, incertae sedis; Permian (Rothliegendes); Manebach-Kammerberg, Germany.
- ASPIDIOPTERIS** E. W. Berry, 1911.
 Nom. nud.; a name suggested by Berry, E. W., 1911a, p. 242, for possible reception of certain species of *Cladophlebia*.
- ASPIDITES** Colla, 1829.
Aspidites filixmas Colla, in Borson, 1829, p. 181.
- ASPIDITES** Goeppert, 1836.
Aspidites dentatus Goeppert, 1836, p. 355, pl. 21, figs. 7, 8.
- ASPLENIODES** Koenig, 1825.
Aspleniodes obtusum Koenig, 1825, pl. 16, fig. 199; no description; fernlike foliage.
- ASPLENIOPTERIS** Sternberg, 1825.
Aspleniopteris difformis Sternberg, 1825 (1820-38), Tentamen, p. xxi, pl. 24, fig. 1; fern? foliage; Tertiary (Braunkohle); Bohemia.
- ASPLENIOPTERIS** Fontaine, 1889.
Aspleniopteris pinnatifida Fontaine, 1889, p. 118, pl. 22, figs. 1-3, 6, 7; fern foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.
- ASPLENIPHYLLUM** Hartung, 1940.
Aspleniphyllum foersteri (Debey and Ettingshausen) Hartung, 1940, p. 98; pl. 1, figs. 1-3, 5, 6; pl. 2, figs. 6, 7; Upper Cretaceous; Prince Boris mine, Bulgaria.
- ASPLENITES** Colla, 1829.
Asplenites trichomanes Colla, in Borson, 1829, p. 33.
- ASPLENITES** Goeppert, 1836.
Asplenites heterophyllum Goeppert, 1836, p. 278, pl. 18, fig. 1; fertile fern foliage; Charlottenbrunn, Silesia.
- ASSEIBOPSIS**.
 Error for *Apeibopsis*, in Peola, 1901, p. 189.
- ASTELIAEPHYLLUM** Squinabol, 1892.
Asteliaephyllum italicum Squinabol, 1892, p. 52, pl. 20, fig. 1; leaf, Draceneae; Tertiary; Santa Giustina, Italy.
- ASTEROCALAMITES** (Schimper) Zeiller, 1879.
Asterocalamites scrobiculatus (Schlotheim) Zeiller, 1879, p. 17, pl. 159, fig. 2; articulate stem cast, vascular strands not alternating at node; Carboniferous; France.
- ASTEROCALAMITOPSIS** Gothan, 1949.
Asterocalamitopsis sphenophylloides Gothan, 1949, p. 18, pl. 3, figs. 7-9; pl. 4, figs. 1-4; articulate stem and foliage impression; Lower Carboniferous; Dobrilugk, Germany.
- ASTEROCALYX** Ettingshausen, 1888.
Asterocalyx stiriacus Ettingshausen, 1888, p. 281, pl. 3, figs. 1-4; leaf and inflorescence?; Dioscoreae; Miocene; Münzenberg, Styria.
- ASTEROCARPUS** Goeppert, 1836.
Asterocarpus sternbergii Goeppert, 1836, p. 188, pl. 6, figs. 1-3; fertile fern foliage, Marattiaceae?
- ASTEROCELASTRUS** Velenovsky and Viniklar, 1926.
Asterocelastrus cretaceous Velenovsky and Viniklar, 1926, p. 50, pl. 1, fig. 11; fruit, compared with *Pterocelastrus*; Cretaceous; Utruby, Bohemia.
- ASTEROCHLAENA** Corda, 1845.
Asterochlaena cottai Corda, 1845, p. 81. For *Tubicaulis ramosus* Cotta, 1832, p. 23, pl. 3, figs. 1-3; origin unknown. See also Goeppert, 1864-65, p. 41, pl. 8, fig. 1; pl. 9, fig. 1; and Posthumus, 1931.
- ASTEROCHLAENOPSIS** Sahni, 1930.
Asterochlaenopsis kirgisica (Stenzel) Sahni, 1930, p. 461; tree fern, allied to *Asterochlaena* and "*Clepsydropsis australis*"; age unknown, possibly Permian; near Pawlodar on river Irtisch, near Akmolinsk, Kirgiz Steppes, west Siberia.

ASTEROCYCLITES Romanski, 1890.

Asterocyclites sp. Romanski, 1890, p. 144, pl. 19, fig. 3a; Lower Jurassic; Thian-Schan, Turkistan.

ASTERODENDRON Eichwald, 1846.

Asterodendron issedonum Eichwald, 1846, p. 562. See also Eichwald, 1851, p. 252, pl. 14, figs. 4-9.

ASTERODISCUS Zalesky, 1937.

Asterodiscus disparis Zalesky, 1937b, p. 78, fig. 45; lobed cupulelike organ; Permian; Russia.

ASTROPHRAGMIUM Reinsch, 1880.

Asterophragmium superbum Reinsch, 1880, p. 7, pl. 2, figs. 4, 5; Upper Carboniferous; Saarbruck, Rhenish Prussia.

ASTROPHYCUS Lesquereux, 1876.

Asterophycus corii Lesquereux, 1876a, p. 139, pl. 2, figs. 1, 2; incertae sedis; Carboniferous; near New Harmony, Ind.

ASTROPHYLLITES Brongniart, 1822.

Asterophyllites radiatus Brongniart, 1822, p. 235, pl. 2, fig. 7; foliage; Carboniferous.

ASTROPHYLOSTACHYS Schimper, 1880.

Asterophyllostachys binneyana Schimper, in Schimper and Schenk, 1880 (1879-90), p. 169, 173, fig. 128(2); calamite cone, Upper Carboniferous.

ASTROPHYLLUM Schimper, 1869.

Asterophyllum furcatum (Lindley and Hutton) Schimper, 1869 (1869-74) p. 345. For *Solenites furcatus* Lindley and Hutton, 1831-37, pl. 209.

ASTROPTERIS Dawson, 1880.

Astropteris noveboracensis Dawson, 1880a, p. 476; stem, Cladoxyleae; Devonian; New York. See also Dawson, 1881b, p. 299, pl. 12, figs. 1-9.

ASTEROSOMA Otto, 1854.

Asterosoma radicumforme Otto, 1854 (1852-54), p. 15, pl. 2, fig. 4; pl. 3, figs. 1, 2; described as "algae dubiae," probably not plant; Cretaceous (Quader-sandstein); Königstein, Saxony.

ASTEROTHECA Presl, 1845.

Asterotheca sternbergii (Goepfert) Presl, in Corda, 1845, p. 89. For *Asterocarpus sternbergii* Goepfert, 1836, p. 188, pl. 6, figs. 1-4; fertile frond, Marattiaceae; Carboniferous.

ASTEROthyrites Cookson, 1947.

Asterothyrites sinuatus Cookson, 1947, p. 209, pl. 12, fig. 8; mycelium and ascomata, Microthyriaceae; Oligocene-Miocene; Yallourn and Hazelwood, Victoria.

ASTEROXYLON Kidston and Lang, 1920.

Asteroxylon mackiei Kidston and Lang, 1920b, p. 664, pls. 1-17; Psilophytales; Old Red Sandstone, Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

ASTRAPAEITES Langeron, 1899.

Astrapaeites pumicosus Langeron, 1899, p. 448, pl. 4, fig. 2; leaf, compared with *Dombeya* and *Astrapaea*; Eocene; Sézanne, France.

ASTROCARYOPSIS Fliche, 1896.

Astrocaryopsis sanctaemanehildae Fliche, 1896, p. 276, pl. 13, figs. 5, 6; seed, incertae sedis; Upper Cretaceous (Cenomanian); Ste.-Maneould, France.

ASTROCHARA Stache, 1880.

Astrochara liburnica Stache, 1880, p. 201; nom. nud.

ASTROCLADIUM Braun, 1840.

Astrocladium lineare Braun, 1840, p. 94; nom. nud.

ASTROCUPULITES Halle, 1927.

Astrocupulites acuminatus Halle, 1927, p. 219, pl. 48, figs. 10, 11; "inflorescence"-bearing cupules; Lower Shihhotse series, Permian; Ch'en-chia-yu, central Shansi, China.

ASTROMYELON Williamson, 1883.

Astromylon williamsonis (Cash and Hicks) Williamson, 1883, p. 27; petrified calamite root; Halifax beds, Upper Carboniferous; England.

ASTROPOLITHON Dawson, 1878.

Astropolithon hindii Dawson, 1878, p. 83. See also Dawson, 1888, p. 30, fig. 9.

ATACTOXYLON Hartig, 1848.

Atactoxylon linkii Hartig, 1848a, p. 171; wood; Tertiary; Wetterau, Ratzburg, Germany.

ATHROTAXIDIUM Menzel, 1900.

Athrotaxidium bilinicum Menzel, 1900, p. 97, pl. 5, figs. 13-16; Oligocene; Preschen, Bohemia.

ATHROTAXITES Unger, 1849.

Athrotaxites lycopodioides Unger, 1849, p. 346, pl. 5, figs. 1, 2; foliage-bearing shoots and cones, Coniferales; Jurassic; Solenhofen, Bavaria.

ATHROTAXOPSIS Fontaine, 1889.

Athrotaxopsis grandis Fontaine, 1889, p. 240, pls. 114, 116, 135; foliage and cones, believed to be related to *Athrotaxis*; Potomac group, Lower Cretaceous; Fredericksburg, Va.

ATOPOCHARA Peck, 1938.

Atopochara trivolvus Peck, 1938, p. 174, pl. 28, figs. 8-12; oogonium, Charophyta; Trinity group, Lower Cretaceous; Irion County, Tex.

ATRAC TYLIOPSIS Pia, 1937?

Atractyliopsis sp. Pia, 1937, p. 829; Dasykladaceae; Paleozoic.

ATTALEINITES Tuzson, 1914.

Attaleinites apiculata Tuzson, 1914, p. 246, pl. 16, fig. 1; fragment of infructescence, Palmaceae?; Oligocene; Palvolgy valley near Budapest, Hungary.

AUERBACHIA Trautschold, 1870.

Auerbachia echinata Trautschold, 1870, p. 228, pl. 22, fig. 3; *incertae sedis*; Wealden; Tarjuchina-Berg, Russia.

AULACOLEPIS Ettingshausen, 1895.

Aulacolepis rhomboidalis Ettingshausen, 1895, p. 12, pl. 1, fig. 10; *seed, Coniferales*; Upper Cretaceous; Station Oxley, Australia. *See also* Ettingshausen, 1893, p. 147; *nom. nud.*

AULACOPHYCOS Massalongo, 1859.

A generic name proposed for *Palaeophycus simplex* Hall, apparently intended as *Aulacophycus simplex* (Hall) Massalongo, in Massalongo and Scarabelli, 1859, p. 92.

AULACOPHYCUS Eichwald, 1860.

Aulacophycus costatus Eichwald, 1860, p. 50, pl. 1, fig. 1; *incertae sedis*; Carboniferous; Tarkhansk, Altai, Russia.

AULACOPTERIS Corda, 1847.

Aulacopteris sackii Corda, 1847, p. 17; *nom. nud.*

AULACOPTERIS Grand'Eury, 1877.

Aulacopteris vulgaris Grand'Eury, 1877, p. 125, pl. 12; fernlike foliage; Carboniferous; Loire, France. *See also* Posthumus, 1931.

AULACOTHECA Halle, 1933.

Aulacotheca elongata (Kidston) Halle, 1933, p. 30, pl. 7; figs. 7, 9; pteridosperm microsporangiate organ; Lower Yorkian, Carboniferous; Calderbank near Airdrie, Scotland.

AULACOXYLON Combes, 1907.

Aulacoxylon sparnacense Combes, 1907, p. 28, pl. 1, figs. 1-3; wood, dicotyledon; Eocene.

AULARTHROPHYTON Massalongo, 1857.

Aularthrophyton foramosum Massalongo, 1857a, p. 570, pl. 1, figs. 1, 4; pl. 2, figs. 1, 2; pl. 3, figs. 1, 3; pl. 4, figs. 1, 2; pl. 5, figs. 1, 3; pl. 8, figs. 1-3; *incertae sedis*; Eocene; Monte Colle, Italy.

AULOPHYCUS Fenton and Fenton, 1939.

Aulophycus repens Fenton and Fenton, 1939, p. 104, fig. 5; pl. 7, figs. 1, 2; calcareous alga; Cambrian; head of Death Canyon, Teton Mts., Wyo.

AUSTRELLA Dana, 1849.

Austrella rigida Dana, 1849, p. 720, pl. 14, figs. 7, 8; Carboniferous; Newcastle, New South Wales.

AUSTROCLEPSIS Sahni, 1932.

Austroclepsis australis (Osborn) Sahni, 1932b, p. 274. For *Ankyropteris australis* Osborn, in Sahni, 1919, p. 82, pl. 4; Zygopterid fern; Carboniferous; Australia. *See also* Sahni, 1928; Sahni, 1932.

AUTOPHYLLITES Grand'Eury, 1890.

Autophyllites furcatus Grand'Eury, 1890, p. 225, pl. 17, figs. 9-19; articulate stem with foliage; Carboniferous; St.-Étienne, France.

AUTUNIA Krasser, 1921.

Autunia milleryensis (Renault) Krasser, 1921a, p. 20. For *Cycadospadia milleryensis* Renault, 1896, p. 329, pl. 73, figs. 1-7.

AZOLLOPHYLLUM Penhallow, 1890.

Azollophyllum primaevum Penhallow, in Dawson, 1890, p. 77, fig. 2; compared with *Azolla caroliniana* but apparently poorly preserved; Miocene; Stump Lake, British Columbia.

B**BACCA** Engelhardt, 1922.

Bacca diospyroides Engelhardt, 1922, p. 77, pl. 23, fig. 17; lower Tertiary; Messel near Darmstadt, Hesse.

BACCHARITES Saporta, 1881.

Baccharites aquensis Saporta, 1881, p. 1132. For *Lomatites aquensis* Saporta, 1862, p. 253, pl. 7, fig. 10; Oligocene; Aix, Provence, France.

BACCITES Zenker, 1833.

Baccites cacaoides Zenker, 1833, p. 10, pl. 1, figs. 4-8; seed or fruit?; Tertiary (Braunkohle); Altenburg, Germany.

BACHASUPTERIS Zalesky, 1937.

Bachasupteris lobata Zalesky, 1937b, p. 589, figs. 4-7; fern pinnule fragments; Upper Devonian; near Bakhtcha and Grande Karakouba, Donets Basin, Russia.

BACILLARITES Karl Feistmantel, 1867.

Bacillarites problematicus Karl Feistmantel, 1867, p. 59; Pennsylvanian; Radnitz, Bohemia. *See also* Geinitz, 1870, p. 63, pl. 1, fig. 12.

BACILLITES Meschinelli, 1898.

Bacillites permienis (Renault and Bertrand) Meschinelli, 1898, p. 67, pl. 19, fig. 12; Schizomycete, in coprolite; Permian; France.

BACTRITES E. W. Berry, 1924.

Bactrites pandanifolius E. W. Berry, 1924b, p. 52, pl. 7, figs. 1-6; leaf fragment, Palmaceae; Lisbon formation, Eocene; near Newton, Newton County, Miss.

BACTRYLLIUM Heer, 1853.

Bactryllium canaliculatum Heer, 1853, p. 125, pl. 6, fig. E; Upper Triassic (Keuper); Val Gorno, Austria.

BAIERA Braun, 1843.

Baiera dichotoma Braun, in Münster, 1843, p. 20, pl. 12, figs. 1-5; deeply dissected, apparently ginkgophyte leaf; Bayreuth and Strullendorf, Bavaria.

BAIERELLA Robert Potonie, 1933.

Preuss. geol. Landesanst. Inst. Paläobotanik u. Petrographie Brennsteine, 1933, Arb., Band 3, p. 249; Gymnospermae; Lower Jurassic (not seen). *See also* Gothan, 1942b, p. 108.

- BAIERIDIUM** Gothan and Gimm, 1930.
Baieridium alphlebiaeforme Gothan and Gimm, 1930, p. 62-63, pl. 9, figs. 4-6; Carboniferous; Linderberg near Ilmenau, Germany.
- BAIEROPSIS** Fontaine, 1889.
Baieropsis expansa Fontaine, 1889, p. 207, pls. 89-92; ginkophyte foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.
- BAJERA** Sternberg, 1825.
Bajera Scanica Sternberg, 1825 (1820-38). Tentamen, p. xxviii, pl. 47, fig. 2; in certae sedis.
- BALANITOCARPUM** Menzel, 1913.
Balanitocarpum ovatum Menzel, 1913, p. 36, pl. 4, fig. 15; fruit, Zygophyllaceae; Tertiary (Braunkohle); Germany.
- BALANTITES** Goeppert, 1836.
Balantites martii Goeppert, 1936, p. 337, pl. 37, figs. 5, 6; sterile fern foliage; Waldenburg, Silesia.
- BALIOSTICHUS** Sternberg, 1833.
Baliostichus ornatus Sternberg, 1833 (1820-38), p. 31, pl. 25, fig. 3; defoliated twig, Coniferales?; Upper Jurassic; Solenhofen, Bavaria.
- BAMBUSITES** Ettingshausen, 1887.
Bambusites arthrostylinus Ettingshausen, 1887a, p. 95, pl. 9, figs. 1, 1a; leaf, Gramineae?; Eocene; Vegetable Creek, Australia.
- BAMBUSIUM** Unger, 1845.
Bambusium sepultum Unger, 1845 (1841-47), p. 128, pl. 40, figs. 1, 2; incertae sedis; Tertiary; Radoboj, Croatia.
- BANARAPHYLLUM** E. W. Berry, 1937.
Banaraphyllum ovatum E. W. Berry, 1937, p. 46, pl. 9, fig. 1; leaf, Flacourtiaceae; Paleocene; Cerro Funes, between Chubut and Santa Cruz, Patagonia.
- BANISTERIOPHYLLUM** Ettingshausen, 1886.
Banisteriophyllum australiense Ettingshausen, 1886, p. 125, pl. 14, fig. 13; leaf, Malpighiaceae; Eocene, Tingha, Australia.
- BANKSICARPUS** Velenovsky and Viniklar, 1927.
Banksicarpus cretaceus Velenovsky and Viniklar, 1927, p. 44, pl. 10, figs. 4, 5; infructescence, compared with *Banksta*; Cretaceous; Vyserovice, Bohemia.
- BANKSIAEIDITES** Cookson, 1950.
Banksiaeacidites minimus Cookson, 1950, p. 169, pl. 1, figs. 8, 9; pollen, compared with *Banksia* and *Dryandra*; Tertiary (Oligocene-Miocene?); Yallourn and Yallourn North, Victoria.
- BANKSIEAEPHYLLUM** Cookson, 1950.
Banksieaephyllum angustum Cookson, 1950, p. 146, pl. 1, figs. 1-10; mummified leaves, Proteaceae; Oligocene (Brown coal); Yallourn and Yallourn North, Victoria.
- BANKSIOXYLON** Crie, 1889.
Banksioxydon australe Crie, 1889a, p. 78; nom. nud.; Pleistocene, Australia.
- BANKSIPHYLLUM** Velenovsky, 1889.
Banksiphyllum pusillum Velenovsky, 1889, p. 53.
- BANKSITES** Saporta, 1861.
Banksites integer Saporta, in Heer, 1861, p. 138; Eocene; St. Zacharie, Provence, France. See also Saporta, 1863, p. 68, pl. 8, fig. 7.
- BARAGWANATHIA** Lang and Cookson, 1935.
Baragwanathia longifolia Lang and Cookson, 1935, p. 425, pls. 29-31; lycopod, leafy shoots with sporangia; Lower Ludlow, Silurian; Australia.
- BARAKARIA** Seward and Sahni, 1920.
Barakaria dichotoma (Feistmantel) Seward and Sahni, 1920, p. 16, pl. 3, fig. 29; foliage, some resemblance to *Schizoneura*; Barakar beds, Lower Gondwana; Auranga coalfield, India.
- BARDELLA** Zalesky, 1937.
Bardella splendida Zalesky, 1937b, p. 76, fig. 43; shoots bearing leaves, Coniferales; Permian; Kroutala Katouchka, Russia.
- BARDIA** Zalesky, 1933.
Acad. sci. U. R. S. S. Bull., 1933a, p. 284; Pteridospermae; Permian (not seen). See also Gothan, 1942b, p. 108.
- BARDOCARPUS** Zalesky, 1937.
Bardocarpus aliger Zalesky, 1937b, p. 87, fig. 56; winged seed; Permian; Matveyevo, USSR.
- BARINOPHYTON** David White, 1905.
Barinophyton richardsoni David White, in Smith and White, 1905, p. 65, pl. 4, figs. 5-8; fertile fern? frond; Upper Devonian; Perry, Maine.
- BARINOSTROBUS** Kräusel and Weyland, 1941.
Barinostrobus spicatus (Dawson) Kräusel and Weyland, 1941, p. 51, pl. 13, figs. 10, 11; cone?, incertae sedis; Upper Devonian; Perry, Maine.
- BARRANDEINA** Stur, 1882.
Barrandeina dusliana (Krejčí) Stur, 1882, p. 362, pl. 3, figs. 3, 4; pl. 5; psilophyte; Devonian (Étage H-h); near Srbsko, Bohemia.
- BARREALIA** Frenguelli, 1942.
Barrealia dichotoma Frenguelli, 1942, p. 281, fig. 1, pl. 1, fig. 1; leaf, Matoniaceae?; Triassic; Argentina.
- BARSASSIA** Zalesky, 1933.
Barassia ornata Zalesky, 1933c, p. 1387, fig. 1; mummified stem, Psilophytales?; Upper Devonian; Kuznets [Kousnetz], Russia.

BASSANIA Gasparis, 1895.

Bassania keuperiana Gasparis, 1895, p. 69, figs. a, b; Upper Triassic (Keuper); Bayreuth, Bavaria.

BATHYPTERIS Eichwald, 1860.

Bathypteris rhomboidea Eichwald, 1860, p. 96, pl. 4, figs. 1, 2; stem, Osmundaceae; Bjelebel, Orenbourg, Russia. *See also* Posthumus, 1931.

BATODENDRON Landsborough, 1844.

Batodendron sp. Landsborough, in Patrick, 1844, p. 290; nom. nud.

BATODENDRON Chachloff, 1921.

Batodendron sp. Chachloff, 1921, p. 19, figs. 23-25; Upper Devonian; Lake Balbach, Siberia.

BAUHINITES Seward and Conway, 1935.

Bauhinites groenlandica Seward and Conway, 1935, p. 25, fig. 21; leaf, compared with *Bauhinia glauca* Wall, Leguminosae; Cretaceous; Greenland.

BEANIA Carruthers, 1869.

Beania gracilis Carruthers, 1869, p. 98, pl. 4; infructescence, Cycadales; Jurassic; Grinstead, Yorkshire, England. For recent discussion and associated parts, *see* Harris, 1941.

BEANIOPSIS Ganju, 1944.

Beaniopsis rajmahalensis Ganju, 1944, p. 76, pl. 2, figs. 15, 16; fig. 2; seed-bearing cone resembling *Beania*, probably Cycadaceae; Jurassic; Onthea, Rajmahal Hills, India.

BEATRICEA Billings, 1857.

Beatricea nodulosa Billings, 1857, p. 344; incertae sedis; Lower Silurian; Anticosti at Wreck Point, Canada.

BEAUPREAITES Cookson, 1950.

Beaupreaites elegansiformis Cookson, 1950, p. 168, pl. 1, figs. 2-4; pollen, compared with *Beauprea elegans*; Tertiary (Oligocene-Miocene?); many localities, southeastern Australia.

BECHERA Sternberg, 1825.

Bechera ceratophylloides Sternberg, 1825 (1820-38), Tentamen, p. xxx, pl. 35, fig. 3; roots, or poorly preserved articulate stem and leaf remains; Upper Carboniferous; Swina, Bohemia.

BECKETTIA Reid and Chandler, 1933.

Beckettia mastixioides Reid and Chandler, 1933, p. 456, pl. 25, figs. 28-36; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

BECKLESIA Seward, 1895.

Becklesia anomala Seward, 1895, p. 179, pl. 14, figs. 2, 3; foliage, incertae sedis; Wealden; Ecclesbourne, near Hastings, England.

BEDHEIMIA Schuster, 1933.

Beltr. Geologie Thüringen, 1933, Band 3, p. 239; Lycopodiales; Keuper (not seen). *See also* Gothan, 1942b, p. 108.

BEINERTIA Goeppert, 1836.

Beinertia gymnogammoides Goeppert, 1836, p. 273, pl. 16, figs. 4, 5; sterile fern foliage; Charlottenbrunn, Silesia.

BELMNOPTERIS Ottokar Feistmantel, 1876.

Belmnopteris woodmasoniana Ottokar Feistmantel, 1876, p. 371, pl. 20, figs. 1, 2; fern? foliage; Damuda series Gondwana system; Raniganj, India.

BELNOPHYLLUM Zalesky, 1928.

Belenophyllum acericulum Zalesky, 1928, p. 801; nom. nud.; Lower Carboniferous; North Caucasus.

BELNOPTERIS Zalesky, 1930.

Belenopteris ivanovi Zalesky, 1930f, p. 928; nom. nud.

BELIDOXYLON Hartig, 1848.

Belidoxydon acerosa (Unger) Hartig, 1848b, p. 138. For *Peuce acerosa* Unger, 1841 (1841-48), p. 14, pl. 3, figs. 1-44; Miocene; Wurmberg, Styria.

BELODENDRON Debey, 1848.

Belodendron nesii Debey, 1848, p. 121; nom. nud.

BELONODENDRON Marck, 1863.

Belonodendron densifolium Marck, 1863, p. 80, pl. 13, figs. 8, 9.

BELTINA Walcott, 1899.

Beltina danai Walcott, 1899, p. 239, pls. 25-27; considered by Walcott to be crustacean but by others to be alga (*see* Fenton and Fenton, 1931, p. 686); Greyson shales, Algonkian; Deep Creek Canyon, near Glenwood, Mont.

BELZUNGIA Morelet, 1908.

Belzungia borneti Morelet, 1908, p. 97, fig. 2; siphonaceous alga; Eocene (Thanetian); Boncourt, France.

BEMBERGIA Caspary, 1881.

Bembergia pentatrias Caspary, 1881, p. 29; Tertiary; Samland, Baltic Prussia.

BENIZIA Debey and Ettingshausen, 1859.

Benizia calopteris Debey and Ettingshausen, 1859b, p. 216, pl. 5, figs. 13-17; fertile fern frond fragment; Upper Cretaceous; Aachen, Rhenish Prussia.

BENNETTICARPUS T. M., Harris, 1932.

Bennetticarpus oxylepidus T. M., Harris, 1932b, p. 101, pl. 14, figs. 1-6, 11; fruit, Bennettitales; *Lepidopteris* bed, Rhaetoliasic; Scoresby Sound, east Greenland.

BENNETTISTEMON Harris, 1932.

Bennettistemon amblyon Harris, 1932b, p. 98, pls. 11, 12; microsporophyll, Bennettitales; *Lepidopteris* bed, Rhaetoliasic; Scoresby Sound, east Greenland.

BENNETTITACEARUM Gothan, 1914.

Bennettitacearum sp. Gothan, 1914, p. 132, pl. 27, fig. 5; cycadophyte cone fragment; Rhaetic; Wasserstühl, near Rollhofen, Bavaria.

- BENNETTITANTHUS** Turutanova-Ketova, 1930.
Bennettitanthus masculinus Turutanova-Ketova, 1930, p. 151, pl. 5, fig. 38; Jurassic, southwest Turkistan.
- BENNETTITES** Carruthers, 1870.
Bennettites saabyanus Carruthers, 1870, p. 698, pl. 57; cycadophyte trunk; Wealden; Brook Point, Isle of Wight, England.
- BENNETTITOLEPIS** Florin, 1933.
Bennettitolepis dactylota (Harris) Florin, 1933, p. 34. For *Cycadospadix dactylota* Harris, 1932b, p. 97, pl. 10, figs. 1, 2; megasporophyll, Bennettitales; *Leptodictis* bed, Rhaeto-Massic; Scoresby Sound, east Greenland.
- BENSONIA** Buckman, 1845.
Bensonia ovata Buckman, in Murchison, 1845, p. 93; "a parallel veined (aquatic?) endogen"; Stonesfield slate; Sevenhampton Common, England.
- BENSINITES** Rina Scott, 1908.
Bensonites fusiformis Rina Scott, 1908, p. 683, figs. 1-7; sporangia; Lower Carboniferous; Burntisland, Scotland.
- BENSTEDTIA** (Seward) Knowlton, 1911.
Benstedtia benstedii (König) Knowlton, 1911, p. 468; coniferous stem fragment; Lower Greensand, Cretaceous; Kent, England. The generic name was assigned by Seward, 1896a, but no species designated; the taxonomy is reviewed by Knowlton, 1911, although Stopes, 1911, criticizes his treatment on the grounds that it "is not a recognizable species."
- BENTHAMIPHYLLUM** Velenovsky, 1889.
Benthamiphyllum dubium Velenovsky, 1889, p. 58. For *Benthamia dubia* Velenovsky, 1887, p. 11, pl. 7, fig. 4; Upper Cretaceous; Vyserovice, Czechoslovakia.
- Berberidiphyllum** Dusen, 1899.
Berberidiphyllum reflexum Dusen, 1899, p. 106, pl. 8, fig. 11; leaf fragment, compared with *Berberis buxifolia* Lamarck; Oligocene; Rio Guillermo, Chile.
- BERENDTIA** Goeppert, 1845.
Berendtia primuloides Goeppert, in Berendt, 1845, p. 80, pl. 5, figs. 21-26; staminate flower, dicotyledon; Miocene; Prussia.
- BERGERIA** Presl, 1838.
Bergeria acuta Presl, in Sternberg, 1838 (1820-38), p. 184, pl. 48, fig. 1a; impression of *Lepidodendron* leaf cushion; Carboniferous; Bohemia.
- BERGIOPHYTON** Kurtz, 1902.
Bergiophyton insigne Kurtz, 1902, p. 211; nom. nud.
- BERGIOPTERIS** Kurtz, 1921.
Bergiopteris insignis Kurtz, 1921, p. 149; "Permo-Carboniferous"; Argentina.
- BERNETTIA** Gothan, 1914.
Bernetitia inopinata Gothan, 1914, p. 58, pl. 27, figs. 1-4; pl. 34, fig. 3; cycadophyte? cone; Rhaetic; Nürnberg.
- BERNOULLIA** Heer, 1876.
Bernoullia helvetica Heer, 1876a, p. 88, pl. 38, figs. 1-6; fertile fern foliage; Triassic; Switzerland.
- BERRIOCHLOA** Elias, 1932.
Berriochloa glabra (Berry) Elias, 1932, p. 347, pl. 28, figs. 13-16; pl. 29, fig. 1; grass fruit, Hordeae?; near base of Ogallala formation, upper Miocene-lower Pliocene; Wallace County, Kans.
- BERRYA** Knowlton, 1930.
Berrya racemosa Knowlton, 1930, p. 134, pl. 41, figs. 4, 5; raceme of fruits, incertae sedis; Denver formation, Upper Cretaceous; Golden, Colo.
- BERWYNIA** Hicks, 1882.
Berwynia carruthersi Hicks, 1882, p. 100, pl. 3; arborescent lycopod stem; Silurian; North Wales.
- BETULAEPOLLENITES** Robert Potonie, 1934.
Betulaepollenites microexcelsus Robert Potonie, 1934, p. 58, pl. 2, figs. 22, 27; pollen, Betulaceae; Miocene (Braunkohle).
- BETULINIUM** Unger, 1842.
Betulinium tenerum Unger, 1842a, p. 101; wood, incertae sedis; Tertiary; Mecklenburg, Austria. See also Unger 1847 (1841-47), p. 118, pl. 34, figs. 8-10.
- BETULIPHYLLUM** Dusen, 1899.
Betuliphyllum patagonicum Dusen, 1899, p. 102, pl. 10, figs. 15, 16; leaf, Betulaceae?; Oligocene; Punta Arenas, Chile.
- BETULITES** Goeppert, 1838.
Betulites salzhauseus Goeppert, 1838, p. 567, pl. 42; staminate inflorescence; Miocene; Salzhause, near Nedda, Wetterau, Hesse.
- BETULOIDITES** Thiergart, 1950.
Betuloidites sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 52, pl. C, fig. 17; pollen, Betulaceae; nom. nud.
- BETULOXYLON** Kaiser, 1880.
Betuloxylon oligocenicum Kaiser, 1880b, p. 511; Betulaceae; Oligocene.
- BEVOCASTRIA** Garwood, 1931.
Bevocastia conglobata Garwood, 1931, p. 141, pl. 12, figs. 1-3; alga; Tuedian, Lower Carboniferous; Hole of Lyne, northern Cumberland, England.
- BIARMELLA** Zalesky, 1939.
Biarmella triloba Zalesky, 1939b, p. 353, fig. 32; fern? pinnule fragment; Permian; Tchekarda, USSR.

BIARMOBAIERA Zalesky, 1939.

Biarmobaiera uralensis Zalesky, 1939b, p. 361, fig. 40; ginkgophyte? leaf fragment; Permian; Tchekarda, USSR.

BIARMODENDRON Zalesky, 1939.

Biarmodendron foliosum Zalesky, 1939b, p. 368, fig. 51; foliage twig, Coniferales; Permian; Matveyevo, USSR.

BIARMOPTERIS Zalesky, 1937.

Biarmopteris pulchra Zalesky, 1937b, p. 47, fig. 11; incertae sedis; Permian; near village of Matveyevo, USSR.

BICARPELLITES Perkins, 1904.

Bicarpellites grayana Perkins, 1904, p. 190, pl. 78, fig. 69; fruit; Tertiary; Brandon, Vt.

BICORBULA Condra and Elias, 1945.

Bicorbula arizonica Condra and Elias, 1945, p. 118, pl. 13, figs. 1-8; pl. 14, figs. 1-3; pl. 15, figs. 1-7; pl. 16, figs. 1, 2; bryozoan with algal association; Kaibab formation, middle Permian; east of Jacob's Lake, Ariz.

BIDENTITES Heer, 1859.

Bidentites antiquus Heer, 1859, p. 6, pl. 101, fig. 20; seed, Compositae; Tertiary; Oeningen, Switzerland.

BIGNONICAPSULA E. W. Berry, 1930.

Bignonicapsula formosa E. W. Berry, 1930, p. 132, pl. 43, fig. 3; large capsule containing winged seeds, Bignoniaceae; Wilcox group, lower Eocene; a quarter of a mile east of Denmark, Madison County, Tenn.

BIGNONIOPHYLLUM Ettingshausen, 1870.

Bignoniophyllum getoniaeformis Ettingshausen, 1870b, p. 881, pl. 1, figs. 6, 7; leaf, Bignoniaceae; Miocene; Radoboj, Croatia.

BIGNONIPHYLLUM Velenovsky, 1889.

Bignoniphyllum cordatum Velenovsky, 1889, p. 54.

BIGNONITES Saporta, 1861.

Bignonites palaeospermus Saporta, in Heer, 1861, p. 147; seed, Bignoniaceae; Tertiary. Apparently first illustrated species is *Bignonites americanus* Berry, 1925b, p. 176, pl. 2, fig. 12.

BIGNONOIDES E. W. Berry, 1923.

Bignonoides orbicularis E. W. Berry, 1923, p. 25, pl. 3, fig. 4; seeds, Bignoniaceae; Miocene; Palomares, Saravia estate, Caxaca, Mexico.

BILIGNEA Kidston, 1923.

Bilignea solida Kidston, in Scott, 1923, p. 134; pteridosperm? stem; Carboniferous; Ayrshire, Scotland. See also Scott, 1925, p. 579, pl. 3, figs. 22-37; pl. 4; pl. 5, fig. 35.

BILLARDIERITES Caspary, 1882.

Billardierites longistylus Caspary, 1882, p. 24; flower, in amber, Pittosporaceae; Miocene; Samland, Baltic Prussia. See also Conwentz, 1880, p. 80, pl. 8, figs. 16-19.

BILOBITES Dekay, 1824.

Bilobites rugosa (D'Orbigny) Saporta, 1879, p. 164, fig. 1; incertae sedis; Silurian. Not specifically named in Dekay, 1824.

BIOBRIA Elias, 1932.

Biorbia rugosa (Berry) Elias, 1932, p. 350, pl. 29; nutlets, Borraginaceae; Ogallala beds, early Pliocene; Wallace County, Kans., Yuma County, Colo.

BIOTOCALAMITES Grand'Eury, 1877.

Biotocalamites sp. Grand'Eury, 1877, p. 332; nom. nud.

BJUVIA Florin, 1933.

Bjuvia simplex Florin, 1933, p. 50, pl. 1, fig. 3; pl. 2, figs. 4-7; pl. 3, figs. 4-8; cycadophyte leaf; Rhaetic; Bjuv, Sweden.

BLASARIA Zalesky, 1934.

Blasaria siberica Zalesky, 1934a, figs. 1, 2; lycopod leaf base impression; Devonian; Russia.

BLASTOLEPIS Zigno, 1885.

Blastolepis otozamites Zigno, 1885, p. 174, pl. 42, fig. 9; cycadophyte seed; lower Oolite, Middle Jurassic; Salaarno Valley near Rovere di Velo, Italy.

BLASTOPHRAGMIUM Reinsch, 1880.

Blastophragmium elegans Reinsch, 1880, p. 6, pl. 1; pl. 2, fig. 1. See also Reinsch, 1881, p. 113, pl. 47, figs. 1-7; pl. 48, figs. 1-5; pl. 49, figs. 1-3; Upper Carboniferous; Saarbruck, Rhenish Prussia, etc.

BLASTOPHYCUS Miller and Dyer, 1878.

Blastophycus diadematus Miller and Dyer, 1878, p. 44, pl. 1, figs. 1, 2; plant?; Upper Ordovician; Cincinnati, Ohio.

BLECHNOXYLON Etheridge, 1899.

Blechnoxylon talbragarensense Etheridge, 1899b, p. 135; partly petrified fern stem with leaves attached showing development of secondary wood; "Permian-Carboniferous"; between Gulgong and Cockabutta Hill, county of Bligh, New South Wales.

BLOSENBERGIA Gothan, 1939.

Blosenbergia gallwitziana Gothan, in Gallwitz and Gothan, 1939, p. 763, pl. 49, figs. 9-19; lycopod or psilophyte? stem impression; Upper Devonian; Blosenbergl, Vogtland, Saxony.

BOCKSCHIA Goeppert, 1836.

Bockschia flabellata Goeppert, 1836, p. 176, pl. 1, figs. 1, 2; fertile fern frond; Waldenburg, Silesia.

BOEGENDORFIA Gothan and Zimmerman, 1932.

Boegendorfia semiarticulata Gothan and Zimmerman, 1932, p. 110, pl. 13, figs. 2, 3; pl. 15, fig. 6; pl. 17, figs. 3, 4; Upper Devonian; Upper Bögendorf, Silesia.

BOLBOPODIUM Saporta, 1874.

Bolbopodium pictaviense Saporta, 1874 (1873c-75), p. 258, pl. 118, fig. 2; cycad stem; Jurassic (Oxfordian); Montanais, near Poitiers, France.

BOLIVIANA Salter, 1860.

Boliviana melocactus Salter, 1860, p. 71, pl. 5, fig. 9; incertae sedis; Silurian?; Illimani, Bolivia.

BOLONIA Meunier, 1886.

Bolonia lata Meunier, 1886, p. 567, pl. 30, fig. 8; plant?; Upper Jurassic; Pas-de-Calais, France.

BOMBACIPHYLLUM Engelhardt, 1891.

Bombaciphyllum opacum Engelhardt, 1891, p. 669, pl. 8, fig. 9; leaf, Malvaceae; Tertiary; Caronel, Chile.

BOMBACITES E. W. Berry, 1916.

Bombacites formosus E. W. Berry, 1916a, p. 289, pl. 75, fig. 1; leaves, Bombaceae; Lagrange formation, Wilcox group, lower Eocene; Puryear, Henry County, Tenn.

BOMBACOPHYLLUM Velenovsky, 1889.

Bombacophyllum argillaceum Velenovsky, 1889, p. 39.

BONAVENTUREA Debey and Ettingshausen, 1859.

Bonaventurea cardinalis Debey and Ettingshausen, 1859b, p. 203, pl. 3, figs. 2-9; fern frond and spores; Upper Cretaceous; Aachen, Rhenish Prussia.

BORNIA Sternberg, 1825.

Bornia equisetiformis (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xxviii. See Schlotheim, 1804, pl. 2, fig. 3. First illustrated after 1820 in Steiniger, 1841 (1840-41), fig. 13.

BOROLDAIPHYCUS Vologdin, 1948.

Boroldaiaphycus borovikovii Vologdin, 1948, p. 83, pl. 1; alga; Devonian; Russia.

BOROVICZIA Zalesky, 1905.

Boroviczia karpinskii Zalesky, 1905, p. 331, figs. 19-23; seeds; Lower Carboniferous; Russia. See Seward, 1917, p. 358.

BORRAGINITES Heer, 1859.

Borriginites myosotiflorus Heer, 1859, p. 17, pl. 103, fig. 19; flower, Borraginaceae; Tertiary; Oeningen, Switzerland.

BOSTRICHOPHYTON Squinabol, 1890.

Bostrichophyton pantanellii Squinabol, 1890, p. 183, pl. 7, fig. 5; alga?; Tertiary; Vallata, Valle del Tresinaro, Italy.

BOSWORTHIA Walcott, 1919.

Bosworthia simulans Walcott, 1919, p. 241, pl. 57, fig. 31; pl. 58, fig. 1; alga; Burgess shale, Stephen formation, Middle Cambrian; 1 mile northeast of Burgess Pass, above Field, British Columbia.

BOTHRODENDRON Lindley and Hutton, 1833.

Bothrodendron punctatum Lindley and Hutton, 1833, p. 1, pl. 81; stem compression; High Main coal seam, Carboniferous; Jarrow Colliery, England.

BOTHROSTROBUS (Nathorst) Zalesky, 1904.

Bothrostrobus olryi (Zeiller) Zalesky, 1904, p. 46, 107, pl. 6, figs. 4, 4a, 11, 12; cone of *Bothrodendron*; Upper Carboniferous; Marihay, Belgium. See also Nathorst, 1894, p. 43; Seward, 1910, p. 262.

BOTRYCHIOPSIS Kurtz, 1894.

Botrychiopsis weissiana Kurtz, 1894, p. 121, pl. 1; fern? foliage; "Permo-Carboniferous"; Retamito, San Juan province, Argentina.

BOTRYCHIOXYLON D. H. Scott, 1912.

Botrychioxylon paradoxum D. H. Scott, 1912, p. 373, pls. 37-41; coenopteris fern stem with secondary wood; Lower Coal Measures, Upper Carboniferous; Lancashire, England. The generic name was first given by Scott, 1906, p. 518, with a very brief description; later references were made as follows: Scott, 1907, p. 181; Scott, 1909, p. 318, 344; Bower, 1911, p. 546; however, it was not until 1912 that Scott assigned a specific name, described the fossil in detail, and presented illustrations. See also Posthumus, 1931.

BOTRYOCOCCITES C. E. Bertrand, 1898.

Botryococcites largae C. E. Bertrand, 1898, p. 182, pl. 5, fig. 30a; pl. 11, figs. 127-132; Oligocene; Bois d'Asson, France.

BOTRYOCONUS Goepfert, 1864.

Botryoconus goldenbergi Goepfert, 1864, p. 152; inflorescence, Cordaitales; Upper Carboniferous. See also Grand'Eury, 1877, p. 279, pl. 33.

BOTRYOPTERIS Renault, 1875.

Botryopteris forensis Renault, 1875a, p. 202; petrified fertile frond, Coenopteridales; Upper Carboniferous; St. Étienne, France. See also Renault, 1875b, p. 227, pl. 8; pl. 9, figs. 4, 7; pl. 11, fig. 20; Posthumus, 1931.

BOTRYTITES Meschinelli, 1892.

Botrytites similis (Menge and Goepfert) Meschinelli, in Saccardo, 1892, p. 789. For *Botrytis similis* Menge and Goepfert, in Goepfert, 1853, p. 453.

BOTTGERIA Crie, 1889.

Bottgeria multiradiata Crie, 1889b, p. 19; nom. nud. According to information received by Prof. L. F. Ward from Zeiller, all the specimens (of *Bottgeria*, *Feistmantelia*, *Martinia*, and *Taenioxylon*) of species discussed in this paper by Crie were lost, none of them having been described or figured.

BOUEINA Toulou, 1883.

Boueina hochstetteri Toulou, 1883, p. 1319, pl. 6, figs. 10a-c; pls. 7-9; Middle Jurassic (Oolite); Piroton near Sofia, Bulgaria.

BOULAYA (Carpentier) Halle, 1933.

Boulaya fertilis (Kidston) Halle, 1933, p. 25, pl. 6, figs. 4-9; text fig. 6; pteridosperm microsporangiate organ; Westphalian, Carboniferous; France, Germany, Holland, England. The genus created by Carpentier, 1925, but no specific entity assigned.

BOWERBANKELLA Reid and Chandler, 1933.

Bowerbankella tiliacoroidea Reid and Chandler, 1933, p. 153, pl. 3, figs. 34-41; endocarp, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

BOWERBANKIA Debey, 1849.

Bowerbankia attenuata Debey, 1849, p. 299; nom. nud.

BOWERIA Kidston, 1911.

Boweria schatzarensis (Stur) Kidston, 1911, figs. 5, 6; fern frond fragment, intermediate between botryopterid and modern leptosporangiate ferns?; Upper Carboniferous; Belgium.

BOWMANITES Binney, 1871.

Bowmanites cambrensis Binney, 1871, p. 59, pl. 10, figs. 1-3; cone, Sphenophyllales; Lower Coal Measures, Upper Carboniferous; near Pontypool, South Wales. See also Hoskins and Cross, 1943.

BRACHYBACULITES Gruss, 1928.

Palaeobiologica, 1928, Band 1, p. 514; alga; Devonian (not seen). See also Gothan, 1942b, p. 110.

BRACHYCARPHIUM Berkeley, 1849.

Brachycarphium thomasi Berkeley, 1849, p. 78. A name substituted for the earlier invalid name *Brachycladium thomasi* Berkeley, 1848, p. 382.

BRACHYCLADITES Meschinelli, 1892.

Brachycladites thomasi (Berkeley) Meschinelli, in Saccardo, 1892, p. 790. See also Meschinelli, 1898, p. 81, pl. 22, figs. 9, 10.

BRACHYCLADIUM Berkeley, 1848.

Brachycladium thomasi Berkeley, 1848, p. 382, pl. 11, fig. 2; fungus, compared with *Botrytis*, in amber; East Prussia. See *Brachycarphium*.

BRACHYDACTYLUS Reis, 1923.

Brachydactylus radialis Reis, 1923, p. 113, pl. 3, figs. 7-9; pl. 4, fig. 9; Tertiary; Rhenish Prussia.

BRACHYOXYLON Hollick and Jeffrey, 1909.

Brachyoxylon notabile Hollick and Jeffrey, 1909, p. 54, pls. 13, 14; araucarian wood; Cretaceous; Kreischerville, Staten Island, N. Y.

BRACHYPHYLLUM Brongniart, 1828.

Brachyphyllum mamillare Brongniart, 1828b, p. 109; twig and foliage, Coniferales; Jurassic (Oolitic).

BRACHYRUSCUS Cockerell, 1922.

Brachyruscus allenii Cockerell, 1922, p. 213, fig. 1; pistillate flower, Liliaceae; Miocene; Florissant, Colo.

BRANDONIA Perkins, 1904.

Brandonia globulus Perkins, 1904, p. 192, pl. 78, figs. 73, 74; fruit; Tertiary; Brandon, Vt.

BRASANIOPSIS Saporta, 1894.

Brasaniopsis venulosa Saporta, 1894, p. 192, pl. 34, figs. 1-4; leaf, Nymphaeaceae; Mesozoic; Portugal.

BRAVARDIA Hauthal, 1902.

Bravardia mendozensis Hauthal, in Kurtz, 1902, p. 57; nom. nud.

BREDAEA Goeppert, 1857.

Bredaea moroides Goeppert, 1857, p. 56, pl. 1, figs. 6, 7; petrified wood, incertae sedis; Tertiary; Java.

BRESCIPHYLLUM Velenovsky, 1889.

Bresciophyllum cretaceum Velenovsky, 1889, pl. 5, figs. 2, 3; dicotyledonous leaf compared with *Brescia formosa*; Upper Cretaceous (Cenomanian); Lidice, Bohemia.

BRETANIA Bertrand and Hovelacque, 1892.

Bretania hardingheni Bertrand and Hovelacque, in Bertrand and Renault, 1892, p. 243, pl. 7, figs. 32-34; Carboniferous; Autun, France.

BRIARDINA (Munier-Chalmas) Morellet and Morellet, 1922.

Briardina archiacae Munier-Chalmas, in Morellet and Morellet, 1922, p. 26 (type species?); Eocene; Gaas, France. [The generic name appears as nom. nud. in Munier-Chalmas, 1877, p. 817.]

BRIGHTONIA Harris, 1932.

Brightonia arota Harris, 1932b, p. 119, pl. 19, microsporophyll, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

BRITTSIA David White, 1899.

Brittsia problematica David White, 1899, p. 98, pl. 47; figs. 1-5; pl. 48, figs. 1-3; fernlike foliage; Pennsylvanian; 3½ miles southeast of Clinton, Mo.

BROECKELLA (Munier-Chalmas) Morellet and Morellet, 1922.

Broeckella belgica Munier-Chalmas, in Morellet and Morellet, 1922, p. 22, pl. 10, figs. 56-57, alga, Dasycladaceae; Eocene (Montien); Mons, Belgium.

BRÖGGERIA Nathorst, 1915.

Bröggeria norvegica Nathorst, 1915, p. 21, pl. 3, figs. 5-7; pl. 4, figs. 4-9; Devonian; Norway.

- BROMELIANTHUS** Massalongo, 1859.
Bromelanthus heufferianus Massalongo, 1859a, p. 62, pl. 36, figs. 2, 3; flower, Bromellaceae?; Eocene; Italy.
- BROMELITES** Schmalhausen, 1884.
Bromelites dolinski Schmalhausen, 1884, p. 296, pl. 30, fig. 7; Eocene; Kiev, Russia.
- BRONGNIARTITES** Unger, 1845.
Brongniartites graecus Unger, 1845, p. 264; wood; Tertiary; Lestos, Greece.
- BRONGNIARTITES** Zalesky, 1927.
Brongniartites salicifolius (Fischer) Zalesky, 1927a, p. 39, pl. 9, fig. 1; pl. 10, figs. 1-3; pl. 11, fig. 1; pl. 12, fig. 2; leaf, incertae sedis; Permian; Belebey district, Urals, Russia.
- BRONNITES** Unger, 1842.
Bronnites antiquensis Unger, 1842, p. 102; wood; Tertiary; Antigua, West Indies.
- BRUKMANNIA** Sternberg, 1825.
Bruckmannia tenuifolia Sternberg, 1825 (1820-38), Tentamen, p. xxix, pl. 19, fig. 2; *Asterophyllites*-like foliage shoot; Carboniferous; Radnitz, Bohemia.
- BRUNSWICKIA** Wherry, 1916.
Brunswickia dubia Wherry, 1916, p. 329, pl. 30; leaves, incertae sedis; Brunswick formation, Triassic; three-quarters of a mile south of Sellersville station, Bucks County, Pa.
- BRYACITES** C. F. W. Braun, 1840.
Bryacites lignitarum C. F. W. Braun, 1840, p. 94; nom. nud. Braun attributes this genus to Brongniart.
- BRYASTERITES** Reinsch, 1881.
Bryasterites sp. Reinsch, 1881, p. 105, pl. 44, fig. 1; pl. 45, figs. 1-3; Permian; Stockheim, Württemberg.
- BRYOCARPUS** Debey, 1849.
Bryocarpus monostachys Debey, 1849, p. 299; nom. nud.
- BUBULCIA** Massalongo, 1857.
Bubulcia globifera (Sternberg) Massalongo, 1857b, p. 777. For *Sargassites globifera* Sternberg, 1833 (1820-38), p. 36, pl. 10, fig. 1.
- BUCHERIA** Dorf, 1933.
Bucheria ovata Dorf, 1933, p. 246, figs. 9-17; Psilophytales; Lower Devonian; Beartooth Butte, Wyo.
- BUCINELLA** Fucini, 1936.
Reference not seen. See Gothan, 1942b, p. 110.
- BUCKLANDIA** Presl, 1825.
Bucklandia anomala (Stokes and Webb) Presl, in Sternberg, 1825 (1820-38), Tentamen, p. xxxiii. For *Clathraria anomala* Stokes and Webb, 1825, p. 423; cycadophyte trunk; Wealden; Sussex, England. See also Seward, 1917, p. 575.
- BUDINGIA** Krasser, 1943.
Budingia sp. Krasser, 1943, p. 15, 1 pl.; Upper Permian; Wetterau, Germany.
- BURIADIA** Seward and Sahni, 1920.
Buriadia heterophylla (Feistmantel) Seward and Sahni, 1920, p. 12, pl. 2, figs. 20-25; *Voltzia*-like shoots, but with bifurcated leaves; Karharbari beds, "Permo-Carboniferous"; Buriadi, India.
- BURSERICARPUM** Reid and Chandler, 1933.
Bursericarpum angulatum Reid and Chandler, 1933, p. 275, pl. 11, figs. 8-10; fruit, Burseraceae; London Clay, Eocene; Sheppey, Kent, England.
- BURSERITES** E. W. Berry, 1924.
Burserites fayettensis E. W. Berry, 1924a, p. 175, pl. 41, figs. 7, 8; leaf, Burseraceae; Fayette sandstone, Eocene; Sabine Parish, La. [This description clearly bears the inscription "n. gen." and it seems evident that the species was intended as the genotype. However (apparently owing to delay in publication of the above) another species was described earlier: *B. venezuelana* Berry, 1921, p. 574, pl. 107, fig. 7; leaf, Burseraceae; Tertiary; Betijoque, State of Trujillo, Venezuela.]
- BURTINIA** Endlicher, 1845.
Burtinia faujasii Endlicher, in Unger, 1845 (1841-47), p. lxxi. Apparently first illustration is in Weber, 1851, p. 45, pl. 1, fig. 7; palm fruit?; Tertiary. See also Endlicher, 1837 (1836-40), p. 257.
- BUTHOTREPHIS** Hall, 1847.
Buthotrephis gracilis Hall, 1847, p. 62, pl. 21, fig. 1; alga; Trenton limestone, Middle Ordovician; Jacksonburgh and Middleville, Herkimer County, N. Y.
- BUTOMITES** Velenovsky, 1889.
Butomites cretaceous Velenovsky, 1889, p. 25, pl. 3, figs. 10-13, 15; Upper Cretaceous; Vidovic, Bohemia.
- BYSMATOSPERMUM** Harris, 1935.
Bysmatospermum macrotrachelum Harris, 1935, p. 132, pl. 29; seed, Bennettiales? *Lepidopteris* zone, Raetic; Scoresby Sound, east Greenland.
- BYTHOCLADUS** Whitfield, 1894.
A name suggested by Whitfield, 1894, p. 353, as being more appropriate than *Buthograptus* but no specific entity assigned.
- BYTHOTREPHIS**.
An emended spelling for *Buthotrephis* Hall, in Eichwald, 1860 (1860-68), p. 56.

- CACTITES** Martius, 1822.
Cactites giganteus Martius, 1822, p. 139; Carboniferous; Silesia.
- CADIOSPORA** Kosanke, 1950.
Cadliospora magna Kosanke, 1950, p. 50, pl. 16, fig. 1; spore; LaSalle coal bed, Pennsylvanian; Bureau County, Ill.

CAENODENDRON Zalesky, 1918.

Caenodendron primaevum Zalesky, 1918, p. 54, pl. 13, figs. 1-4; lycopod stem impression; Carboniferous; Kouou-Tchekou Basin, Russia.

CAENOMYCES E. W. Berry, 1916.

Caenomyces laurinea E. W. Berry, 1916b, p. 162, pl. 88, fig. 4; fungus, *Pyrenomyces*?; Wilcox group, lower Eocene; Oxford Gully, Lafayette County, Miss.

CAENOPTERITES Goeppert, 1836.

Caenopterites volkmanni Goeppert, 1836, p. 23. Goeppert refers to Volkmann, 1720, pl. 12, fig. 5. Also described as *Sphenopteris volkmanniana* Goeppert, 1834, p. 12. See also Goeppert, 1836, p. 267.

CAENOXYLON Zalesky, 1911.

Caenoxylon scotti Zalesky, 1911, p. 13, figs. 1-4; petrified cordaites stem; Permian; Russia. See also Seward, 1917, p. 293; Scott, 1923, p. 283; Zalesky, 1927, p. 44.

CAESALPINIOXYLON Schenk, 1890.

Caesalpinioxylon quirogae Schenk, in Schimper and Schenk, 1890 (1879-90), p. 901, fig. 432; wood; Tertiary?; western Sahara on the coast near Huissi Aissa.

CAESALPINIOXYLON Kräusel, 1922.

Caesalpinioxylon palembangense Kräusel, 1922, p. 247, pl. 2, fig. 1; pl. 3, figs. 1, 2; pl. 7, figs. 6, 11; wood, *Caesalpineae*; Tertiary; Sumatra.

CAESALPINITES Saporta, 1862.

Caesalpinites dispersus Saporta, 1862, p. 289; leaf, compared with *Caesalpinia bahamensis*; Tertiary; Aix, Provence, France. See also Saporta, 1873, p. 125, pl. 18, fig. 30.

CAESALPINIUM Schleiden, 1855.

Caesalpinium trioliense Schleiden, in Schmid and Schleiden, 1855; wood, said to resemble that of *Caesalpinia echinata*; Oligocene; Tyrol. Apparently first illustrated species: *Caesalpinium oweni* (Carruthers) Schuster, 1910, p. 8, pl. 2, figs. 10-12.

CALADIOSOMA E. W. Berry, 1925.

Caladiosoma miocenica E. W. Berry, 1925a, p. 38, pl. 5; leaf fragment, compared with *Caladium* and *Xanthosoma*, *Araaceae*; Miocene; Trinidad, British West Indies.

CALAMARIOPHYLLUM Hirmer, 1927.

Calamariophyllum lingulatum (Germar) Hirmer, 1927, p. 452; articulate stem impression; Carboniferous. For *Equisetites lingulatus* Germar, 1845, p. 27, pl. 10.

CALAMARIOPSIS Henry Potonie, 1902.

Calamariopsis Henry Potonie, 1902, p. 797, no specific name assigned. This genus established for *Calamopsis* Solms, 1896, because of the earlier use of that name by Heer, 1859.

CALAMITEA Cotta, 1832.

Calamitea striata Cotta, 1832, p. 67, pl. 14; pl. 15, figs. 1, 2; petrified calamite stem; Permian; Chemnitz, Germany.

CALAMITES Schlotheim, 1820.

Calamites cannaeformis Schlotheim, 1820, p. 398, pl. 20, fig. 1; pith cast; Upper Carboniferous; Manebach, Wettin, Saxony. See also Seward, 1898, p. 295; and Kidston and Jongmans, 1917.

CALAMITINA C. E. Weiss, 1876.

Calamitina göpperti (Ettingshausen) C. E. Weiss, 1876, p. 127, pl. 17; calamitean stem; Carboniferous.

CALAMITOMYELON Lignier, 1910.

Calamitomylon morierei Lignier, 1910b, p. 128, calamitean stem; Lower Jurassic (Middle Lias); St. Honorine-la-Guil-laume, France.

CALAMOCADUS Schimper, 1869.

Calamocladus longifolius (Brongniart) Schimper, 1869, p. 323, pl. 22, figs. 1-4; calamite foliage.

CALAMODENDREA Grand'Eury, 1877.

Calamodendrea rhizobola Grand'Eury, 1877, p. 296, pl. 31; calamitean roots; Carboniferous; Treve, Loire, France.

CALAMODENDROFLOYOS Grand'Eury, 1877.

Calamodendrofloyos cruciatus (Sternberg) Grand'Eury, 1877, p. 293, pl. A, fig. 9; cortex of *Calamodendron*; Carboniferous; France.

CALAMODENDRON Brongniart, 1849.

Calamodendron striatum Brongniart, 1849, p. 50; petrified calamitean stem; Carboniferous. First? illustration in Mougéot, 1852, p. 32, pl. 5, figs. 1-4. See also Goeppert, 1864 (1864-65), p. 180, pls. 30, 31.

CALAMODENDROPHYLLUM Grand'Eury, 1879.

Calamodendrophyllum bifurcatum Grand'Eury, 1879, p. 579; calamitean foliage; Upper Carboniferous; Vendée, France.

CALAMODENDROSTACHYS Renault, 1890.

Calamodendrostachys dubius Renault, in Renault and Zeller, 1890, p. 471, pl. 55, figs. 3-6; articulate cone impression; Carboniferous; Commentry, France.

CALAMODENDROXYLON Grand'Eury, 1877.

Calamodendroxylon striatum (Cotta) Grand'Eury, 1877, p. 291; wood of a calamite?; Carboniferous; Porchère, Loire, France.

CALAMOPHLOIOS E. A. N. Arber, 1916.

Calamophloios rugosus E. A. N. Arber, 1916, p. 141, pl. 3, fig. 9; calamitean stem impression; Red Clay series, Transition Coal Measures, Upper Carboniferous; Granville Pit, Old Hill, South Staffordshire, England.

CALAMOPHYCUS Lesquereux, 1877.

Calamophycus septus Lesquereux, 1877, p. 165; Lower Helderberg sandstone, Lower Devonian; Michigan.

CALAMOPHYLLITES Grand'Eury, 1877.

Calamophyllites communis Grand'Eury, 1877, p. 39. See also *Calamophyllites* sp. Grand'Eury, 1869, p. 708. First illustrated species appears to be *Calamophyllites geinitzii* Grand'Eury, 1890, p. 208, pl. 14, fig. 1. Articulate pith impression; Carboniferous.

CALAMOPHYTON Kräusel and Weyland, 1925.

Calamophyton primaevum Kräusel and Weyland, in Weyland, 1925, p. 43, fig. 12; Calamophytaceae; upper Middle Devonian; northwest Germany. See also Kräusel and Weyland, 1926.

CALAMOPITUS Williamson, 1869.

Calamopitus sp. Williamson, 1869b, p. 174. See also Williamson, 1871a, p. 506, pl. 23, fig. 1; and Williamson, 1871c; petrified calamite stem; Upper Carboniferous; England. See *Arthrodendron* Scott, 1900a; no specific name ever assigned to this fossil. Only specific name assigned to this (invalid) genus appears to be: *Calamopitus parrani* Grand'Eury, 1890, p. 211, pl. 14, figs. 6-8.

CALAMOPITYS Unger, 1856.

Calamopitys saturni Unger, 1856, p. 160, pl. 3, fig. 7; petrified stem, Calamopityeae; Upper Devonian; Saalfeld, Thuringia. See also *Calamopitys saturni* Unger, 1854b, p. 599; nom. nud.

CALAMOPSIS Heer, 1859.

Calamopsis bredana Heer, 1859, p. 169, pl. 149; palm leaf; Miocene; Oeningen, Switzerland.

CALAMOPTERIS Unger, 1856.

Calamopteris debilis Unger, 1856, p. 158, pl. 2, figs. 1-7; petiole, Calamopityeae; Upper Devonian; Saalfeld, Thuringia. See also *Calamopteris debilis* Unger, 1854, nom. nud.; and Posthumus, 1931.

CALAMORRHIZA Grand'Eury, 1877.

A name to which Grand'Eury, 1877, p. 26, assigned roots that apparently belonged to the Calamites; no specific entities mentioned.

CALAMOSPORA Schopf, Wilson, and Bental, 1944.

Calamospora hartungiana Schopf, in Schopf, Wilson, and Bental, 1944, p. 51, fig. 1; spore; middle McLeansboro formation, Pennsylvanian; Salt Fork of Vermilion River northwest of Fairmount, Vermilion County, Ill.

Calamostachys Schimper, 1869.

Calamostachys typica Schimper, 1869 (1869-74), p. 328, pl. 23; calamite cone.

CALAMOSYRINX Petzholdt, 1841.

Calamosyrinx zwickaviensis Petzholdt, 1841, p. 28, pl. 2; sigillarian stem compression; Upper Carboniferous; Zwickau, Saxony.

CALAMOSYRINX Unger, 1856.

Calamosyrinx devonica Unger, 1856, p. 159, pl. 3, figs. 1-6; petiole, Calamopityeae; Upper Devonian; Saalfeld, Thuringia. See also *Calamosyrinx devonica* Unger, 1854; nom. nud.

CALAMOXYLON Corda, 1838.

Calamoxylon cycadeum Corda, in Sternberg, 1838 (1820-38), p. 195, pl. 54, figs. 8-13; stele fragment of arborescent lycopod?; Carboniferous; Radnitz, Bohemia.

CALATHELLA Florin, 1929.

Calathella kräusei Florin, 1929a, p. 255, pl. 3, figs. 8-10; pl. 4, figs. 6-9; alga, Siphonocladales; upper Zechstein, Permian; Oberhessen, Büdingen, Germany.

CALATHIOPS Goepfert, 1865.

Calathiops beinertiana Goepfert, 1865a, p. 268, pl. 64, figs. 4-6; pteridosperm cupulate or microsporangiate? organ; Permian; near Rothwaldersdorf, Silesia.

CALATHOSPERMUM Walton, 1940.

Calathospermum scoticum Walton, 1940, p. 132, fig. 110; large pteridosperm cupule containing numerous seeds; Lower Carboniferous; Kilpatrick Hills, Scotland. For full treatment, see Walton, 1949.

CALATOLOIDES E. W. Berry, 1922.

Calatoloides eocenicum E. W. Berry, 1922a, p. 253, fig. 1; fruit, Icacinaceae; Wilcox group; Eocene; Freestone County, Tex.

CALCIDELETRIX Mägdefrau, 1937.

Calcideletria flexuosa Mägdefrau, 1937, p. 57, pl. 4, fig. 4; fruit?; Cretaceous; Misburg near Hannover, Germany.

CALCIODINELLUM Deflandre, 1947.

Calciodinellum operosum Deflandre, 1947, p. 1781, figs. 1-6; Dinoflagellate; Sahelien d'el Medhi, Oranie, Algeria.

CALCIPHYTEON Kušta, 1892.

Calciphyton praecambri Kušta, 1892, p. 418, fig. p. 420.

CALCISPHAERA Williamson, 1880.

Calcisphaera laevis Williamson, 1880, p. 521, pl. 20, fig. 70; plant?; Carboniferous; Rhydymwyn, near Mold, Flintshire, England.

CALLEOPHYLLUM Zalessky, 1939.

Calleophyllum lobatum Zalessky, 1939a, p. 370, fig. 53; incertae sedis; Permian; Matveyevo, Krasnaia Glinka, USSR.

CALLIGONOPSIS Massalongo, 1859.

Calligonopsis strumphioides Massalongo, 1859b, p. 55. For *Casuarina strumphioides* Massalongo, 1857b, p. 778.

CALLIPITYS Harris, 1935.

Callipitys leptoderma Harris, 1935, p. 110, pls. 19, 21; cone, Coniferales; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

CALLIPTERIDIUM C. E. Weiss, 1870.

Callipteridium sullivanti (Lesquereux) C. E. Weiss, 1870a, p. 876, pl. 21, figs. 1-3; fernlike foliage; Carboniferous.

CALLIPTERIS Brongniart, 1849.

Callipteris conferta (Sternberg) Brongniart, 1849, p. 66. For *Neuropteris conferta* Sternberg, 1820-38, p. 75, pl. 22, fig. 5; fernlike foliage; Carboniferous; Ottendorf, Silesia.

CALLISPHEBUS Hoeg, 1938.

Callisphenus gracilis Hoeg, 1938, p. 43, pls. 1, 2; alga, probably Dasycladaceae; Wenlock, Silurian; east side island of Kommersoy, near Holmestrand, Oslo Fjord, Norway.

CALLISTEMOPHYLLUM Ettingshausen, 1853.

Callistemophyllum verum Ettingshausen, 1853, p. 83, pl. 27, figs. 11, 12; leaf, Myrtaceae; Tertiary; Haering, Tirol, Austria.

CALLITHAMNOPSIS Whitfield, 1894.

Callithamnopsis fruticosa (Hall) Whitfield, 1894, p. 354, pl. 11, figs. 4-8; alga; Trenton group, Ordovician; Platteville, Wis.

CALLITRITES Endlicher, 1847.

Callitrites brongniartii Endlicher, 1847, p. 274. For *Equisetum brachyodon* Brongniart, 1882, p. 329, pl. 16, fig. 3; coniferous foliage and cones; Eocene; near Paris, France. See also *Callitrities brongniartii* Endlicher in Goepfert, 1850, p. 179, pl. 17, figs. 9-12.

CALLITROXYLON Hartig, 1848.

Callitroxylon ayckeii (Goepfert) Hartig, 1848a, p. 140. For *Taxites ayckeii* Goepfert, 1840, p. 77, and 1841a, p. 730, pl. 17, figs. 10-12; wood; Tertiary; Germany.

CALLIXYLON Zalessky, 1911.

Callixylon trifluevi Zalessky, 1911, p. 29, pl. 4, figs. 1-3; cordaitan wood with bordered pits of tracheids characteristically grouped; Devonian. See also Arnold, 1930.

CALLORITES Fiore, 1932.

Callorites Sacc. nat. Napoli Boll., 1932, v. 43, p. 153; fungi; Eocene (not seen). See Gothan, 1942b, p. 111.

CALLOXYLON Andra, 1848.

Calloxylon hartigii Andra, 1848, p. 633, pl. 5, figs. 7-12; coniferous wood; Tertiary; Bruckdorf, Saxony.

CALOPTERIS Corda, 1845.

Calopteris dubia Corda, 1845, p. 88, pl. 19, figs. 1b, 3; petiole; Upper Carboniferous; Radnitz, Bohemia. See also Hirmer, 1927, p. 540; and Posthumus, 1931.

CALOTHRICITES C. E. Bertrand, 1913.

Calothriticites alexinatzia C. E. Bertrand, 1913, p. 357, pl. 4, figs. 1-16; alga, Cyanophyceae?; Tertiary; Alexinatz, Serbia.

CALVARINUS Reid and Reid, 1910.

Calvarinus reticulatus Reid and Reid, 1910, p. 169, pl. 15, figs. 18-20; nutlet, Boraginaceae; Upper Oligocene; Bovey Tracey, Devon, England.

CALYCITES.

See *Calycithes*, Massalongo. Original spelling was *Calycithes*, but Massalongo and other authors adopted *Calycites*.

CALYCITHES Massalongo, 1850.

Calycithes pentasepalus Massalongo, 1850, p. 72. Apparently first species illustrated is *Calycites lythroides* Visiani and Massalongo, 1856, p. 242, pl. 13.

CALYCOCARPUS Goepfert, 1850.

Calycocarpus thujoideus Goepfert, 1850, p. 180, pl. 18, fig. 5; *Thuja*-like fruit; Upper Carboniferous; Charlottenbrunn, Silesia.

CALYCOPHYSOIDES Berry, 1924.

Calycophsoides balli Berry, 1924b, p. 6, figs. 1, 2; human artifact; Foard County, Tex. See also Berry, in Torrey, v. 37, p. 108.

CALYMMATOTHECA Stur, 1877.

Calymmatotheca stangeri Stur, 1877, p. 151, pls. 8, 9; stem, foliage, cupulate organs, Pteridospermae; Carboniferous (Culm); Hruschau, Witkowitz, Moravia. See also Zeiller, 1883, p. 182.

CALYPTOPHYCUS J. H. Johnson, 1940.

Calypthophycus verrucius J. H. Johnson, 1940, p. 590, pl. 10, figs. 1-3; calcareous alga, probably Cyanophyceae; Weber formation, Pennsylvanian; Mule Shoe Gulch, Park County, Colo.

CAMASIA Walcott, 1914.

Camasia spongiosa Walcott, 1914, p. 115, pl. 9, figs. 1, 2; pl. 12, figs. 1, 2; pl. 20, figs. 2-6; alga, Cyanophyceae?; Beltian series, Alkonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

CAMBROPORELLA Korde, 1950.

Cambroporella tuvensis Korde, 1950, p. 371, figs. 1-3; alga, Dasycladaceae; Lower Cambrian; Russia.

CAMPOXYLON Hartig, 1848.

Campoxylon hoedlianum (Unger) Hartig, 1848a, p. 138; wood; Tertiary; Germany. For *Peuce hoedliana* Unger, 1839, p. 13; and 1842 (1841-47), p. 26, pl. 10, figs. 1-4.

- CAMPTERONEURA** Debey, 1849.
Campteroneura paradoxa Debey, 1849, p. 299; nom. nud.
- CAMPTOPHYLLUM** Nathorst, 1875.
Camptophyllum schimperii Nathorst, 1875, p. 389. See also Nathorst, 1876, p. 69, pl. 16, figs. 13-16; Rhaetic; Palsjo, Sweden.
- CAMPTOPTERIS** Presl, 1838.
Camptopteris münsteriana Presl, in Sternberg, 1838 (1820-38), p. 168, pl. 33, fig. 9; leaf impression, dicotyledon?
- CAMPYLOPHYLLUM** Gothan, 1914.
Camptophyllum hormanni Gothan, 1914, p. 53, pls. 31-33, 39; cycadophyte? foliage; Rhaetic; Nürnberg, Germany.
- CAMPYLOSPERMUM** Chandler, 1925.
Campylospermum hordwellensis Chandler, 1925, p. 16, pl. 1, figs. 6a-c; fruit, Araceae; Upper Eocene; Hordle, Hampshire, England.
- CANCELLOPHYCUS** Saporta, 1872.
Cancellophycus liasinus Saporta, 1872a-73, p. 135, pl. 5, alga; Jurassic; Digne, France.
- CANNOPHYLLITES** (Brongniart) Nilsson, 1832.
Cannophyllites septentrionalis Nilsson, 1832, p. 346, pl. 1, fig. 9; Lower Cretaceous; Hoganas, Sweden. See also *Cannophyllites virletii* Brongniart, 1828; nom. nud.
- CANTHELIOPHORUS** Bassler, 1919.
Cantheliophorus linearifolius (Lesqueux) Bassler, 1919, p. 97, pl. 9, figs. 1, 2, 8-10; pl. 11, figs. 34-37; lycopod cone scale and sporangium (probably *Lepidocarpon*); coal B8, Pennsylvanian; Boston mine, Pittston, Luzerne County, Pa. See also Schopf, 1941b, p. 559.
- CANTHIDIUM** Unger, 1850.
Canthidium radobojanum Unger, 1850, p. 429; Rubiaceae; Croatia.
- CANTIA** Stopes, 1915.
Cantia arborescens Stopes, 1915, p. 260, pls. 26-28; wood, dicotyledon; Folkestone beds, Lower Greensand, Cretaceous; near Ightham, Kent, England.
- CANTICARPUM** Reid and Chandler, 1933.
Canticarpum celastroides Reid and Chandler, 1933, p. 320, pl. 14, figs. 29-33; fruit, Celastraceae; London Clay, Eocene; Minster, Kent, England.
- CANTICARYA** Reid and Chandler, 1933.
Canticarya sheppeyensis Reid and Chandler, 1933, p. 258, pl. 10, figs. 1-5; fruit, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.
- CANTISOLANUM** Reid and Chandler, 1933.
Cantisolanum daturoides Reid and Chandler, 1933, p. 484, pl. 28, figs. 10-12; fruit, Solanaceae; London Clay, Eocene; Sheppey, Kent, England.
- CANTILILIA** Reid and Chandler, 1933.
Cantililia polysperma Reid and Chandler, 1933, p. 393, pl. 20, figs. 4-11; fruit, Tiliaceae; London Clay, Eocene; Sheppey, Kent, England.
- CAPPARIDIUM** Kuntze, 1904.
Capparidium Kuntze, in Post and Kuntze, 1904, p. 98.
- CAPPARIDOCARPUS** Berry, 1924.
Capparidocarpus sphericus Berry, 1924a, p. 166, pl. 55, figs. 4-9; fruit, Capparidaceae?; Lagrange formation, Eocene; Hickman, Fulton County, Ky.
- CAPPARIDOXYLON** Schenk, 1883.
Capparidoxyylon geinitzi Schenk, 1883a, p. 12, pl. 1, figs. 3, 4; wood; Oligocene?; near Cairo, Egypt.
- CAPPARITES** E. W. Berry, 1919.
Capparites cynphylloides E. W. Berry, 1919a, p. 95, pl. 22, fig. 1; leaf, Capparidaceae; Tuscaloosa formation, Upper Cretaceous; Shirleys Mill, Fayette County, Ala.
- CAPRIFOLIIPITES** Wodehouse, 1933.
Caprifoliipites viridifluminis Wodehouse, 1933, p. 518, fig. 54; pollen, Caprifoliaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.
- CAPSULOCARPUS** E. W. Berry, 1939.
Capsulocarpus dakotensis E. W. Berry, 1939, p. 332, figs. 1-4; podlike capsule, Bignoniaceae?; Cretaceous; half a mile north of Springfield; Brown County, Minn.
- CARACUBOXYLON** Zalesky, 1930.
Caracuboxylon bakhasuense Zalesky, 1930g, p. 1011, pl. 1; petrified stem, Cordaitales; Devonian; Donets, Russia.
- CARAGANDITES** Zalesky, 1933.
Caragandites rugosus Zalesky, 1933b, p. 1385, fig. 1; incertae sedis; Lower Carboniferous; Karaganda, Russia.
- CARATCHETOPTERIS** Zalesky, 1932.
Soc. géol. France Bull, 1932, sér. 5^e, tome 2, p. 322, fig. 10; pteridophyte; Permian; Russia (not seen). See Gothan, 1942b, p. 112.
- CARBONACARPA** John Smith, 1896.
Carbonacarpa annandalensis John Smith, 1896, p. 321, pl. 7, figs. 20-23; incertae sedis; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.

CARDIOCARPON Brongniart, 1828.

First valid description appears to be *Cardiocarpon acutum* Lindley and Hutton, 1833 (1831-37), p. 209, pl. 76; seed casts; Carboniferous; England. Brongniart, 1828b, p. 87, lists five species but all nom. nud.; later Brongniart, 1881, p. 37, described petrified species. See Seward, 1917, p. 334. Various spelled as *Cardiocarpum* and *Cardiocarpus*, the latter being adopted by Brongniart, 1881, and by most recent writers.

CARDIOGLOSSUM Koidzumi, 1934.

Cardioglossum antiquum (Kawasaki) Koidzumi, 1934, p. 113: For *Gigantopteris antiqua* Kawasaki, 1932 (1929-34), p. 34, pl. 100, figs. 2, 3; Jido series, Lower Permian; Tae-dong, Korea.

CARDIONEURA Zalesky, 1934.

Cardioneura amadoca Zalesky, 1934d, p. 1108, figs. 4-6; neuropterid foliage; Donets, Russia.

CARDIOPTERIDIUM Nathorst, 1914.

Cardiopteridium spetsbergense Nathorst, 1914, p. 16, pl. 1, figs. 9-15; pl. 8, figs. 5, 6; pl. 9, figs. 14-26; fernlike foliage; Paleozoic; Spitzbergen.

CARDIOPTERIS Schimper, 1869.

Cardiopteris polymorpha (Goeppert) Schimper, 1869 (1869-74), p. 452; *Neuropteris*-like foliage; lowermost Carboniferous. For *Cyclopteris polymorpha* Goeppert, 1859, p. 502, pl. 38, figs. 5a, 5b.

CARNOCONITES Srivastava, 1944.

Carnoconites compactum Srivastava, 1944, p. 75, pl. 2, fig. 12; female cone of *Pentoxylon*; Jurassic; Santal Parganas District, Behar, India. Brief description with no specific name and no illustrations in Srivastava, 1935, p. 285. See also Srivastava, 1946, p. 204, pl. 5, figs. 46-68. For full consideration of *Pentoxyleae*, see Sahn, 1948.

CAROLITES Spegazzini, 1924.

Carolites patagonica Spegazzini, 1924a, p. 100, fig. 101; leaf, dicotyledon; Eocene; Patagonia.

CAROLOPTERIS Debey and Ettingshausen, 1859.

Carolopteris aquensis Debey and Ettingshausen, 1859b, p. 206, pl. 3, figs. 20-27; fern pinnules; Upper Cretaceous; Aachen, Rhenish Prussia.

CARPANNULARIA Elias, 1931.

Carpannularia americana Elias, 1931, p. 118, pls. 12, 13; pl. 14, figs. 1, 3, 4; pl. 15; *Annularia*-like foliage shoots with seeds said to be attached; lower Pennsylvanian; near Clinton, Henry County, Mo.

CARPANTHOLITES.

See *Carpantholithes*.

CARPANTHOLITHES Goeppert, 1838.

Carpantholithes berendtii Goeppert, 1838, p. 571, pl. 42, figs. 36, 37; flower; Miocene; Danzig, Baltic Prussia.

CARPENTERELLA (Munier-Chalmas) Morellet and Morellet, 1922.

Carpenterella jonesi Morellet and Morellet, 1922, p. 20, pl. 1, figs. 77-80; Dasycladaceae; Eocene; Beynes, France. [*Carpenterella* first cited in Munier-Chalmas, 1877, p. 817; nom. nud.]

CARPENTERIANTHUS Borsuk, 1935.

USSR, Central Geol. et Prosp. Inst. Trans., 1935, v. 37A, p. 21; Hydrangeaceae; Tertiary (not seen). See Gothan, 1942b, 112.

CARPENTIERIA Nemejc and Augusta, 1934.

Carpentieria marocana Nemejc and Augusta, 1934, p. 1, figs. 1a, b.

CARPINIPHYLLUM Nathorst, 1888.

Carpiniphyllum pyramidale (Goeppert) Nathorst, 1888, p. 217, pl. 8, figs. 1-3, 6-8; leaf, dicotyledon; Tertiary; Japan.

CARPINITES Goeppert and Berendt, 1845.

Carpinites dubius Goeppert and Berendt, in Berendt, 1845, p. 85, pl. 4, figs. 29-31; pistillate ament?, Fagaceae; Miocene; Baltic Prussia.

CARPINOXYLON Vater, 1884.

Carpinoxylon compactum Vater, 1884, p. 848, pl. 29, figs. 28, 29; wood; Cretaceous (Lower Cenomanian); Helmstedt, Brunswick.

CARPITES Schimper, 1874.

Carpites pruniformis (Heer) Schimper, 1874, p. 421; seed, incertae sedis; Miocene; Oeningen, Switzerland. For *Carpolithes pruniformis* Heer, 1859, p. 139, pl. 141, figs. 18-30; pl. 68, fig. 5b.

CARPODIUM Zalesky, 1934.

USSR, Central Sci. Geol. Research Inst. Geol. Survey Sec., 1934, p. 12; Gymnospermae; Upper Carboniferous (not seen). See Gothan, 1942b, p. 112.

CARPOLITHES Schlotheim, 1820.

Many species of fossil seeds based on impressions, compressions, and casts have been assigned to *Carpolithus* of Linnaeus and *Carpolithes* of Schlotheim. As *Carpolithes* is a repository for seeds and supposed seeds from almost every geological horizon that cannot be assigned to a natural plant group, a type species can hardly be of significance. For further discussion, see Seward, 1917, p. 364, 497.

CARRADORITES Massalongo, 1859.

Carradorites eseri (Unger) Massalongo, in Massalongo and Scarabelli, 1859, p. 91. Specific name spelled "escheri" by Massalongo but is for *Caulerpites eseri* Unger, 1850a, p. 3.

- CARYAEPOLLENITES** Robert Potonie, 1934.
Caryaepollenites simplex Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 21, pl. 2, figs. 28-30; pollen, Juglandaceae; Miocene; Oberlausitz, Germany.
- CARYOJUGLANS** Kirchheimer, 1936.
Caryojuglans quadrangula Kirchheimer, 1936a, p. 82, pl. 12, figs. 36a-1; fruit, Juglandaceae; Tertiary (Braunkohle); Borna and Meuselwitz, Germany.
- CARYOTISPERMUM** Reid and Chandler, 1933.
Caryotispermum cantiense Reid and Chandler, 1933, p. 104, pl. 1, figs. 11, 12; seed, Palmae; London Clay, Eocene; Sheppey, Kent, England.
- CASEA** Newberry, 1853.
Casea membranacea Newberry, 1853, p. 106; compared with *Cyclopteris*; Pennsylvanian; Middlebury, Ohio.
- CASSIOPHYLLUM** Geyler, 1887.
Cassiophyllum sp. Geyler, 1887a, p. 504, pl. 39, figs. 7, 8.
- CASSIOXYLON** Felix, 1882.
Cassioxydon anomalum Felix, 1882a, p. 69; wood; Tertiary; Antigua, West Indies. See Felix, 1883, p. 15, pl. 2, figs. 3, 5.
- CASTALIITES** Hollick, 1930.
Castalites ordinarius Hollick, 1930, p. 76, pl. 41, fig. 7; leaf, Nymphaeaceae; Upper Cretaceous; Williams coal mine, Yukon River.
- CASTANEOIDITES** Robert Potonie, 1950.
Castaneoidites exactus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 56, pl. B, fig. 30; pollen, Fagaceae; Pliocene, Chatt-Aquitain, Germany.
- CASTELLINIA** Massalongo, 1852.
Castellinia macrocarpa Massalongo, 1852c, p. 206; Eocene; Monte Bolca, Italy.
- CASUARINITES** Schlotheim, 1820.
Casuarinites equisetiformis Schlotheim, 1820, p. 397, for illustrations Schlotheim refers to his 1804, pl. 2, fig. 3; *Asterophyllites*-type foliage; Upper Carboniferous; Wettin, Manebach, Saxony.
- CASUARINITES** Goeppert and Stache, 1855.
Casuarinites iugleri Goeppert and Stache, 1855, p. 42; inflorescence, Casuarinaceae?; Upper Triassic (Keuper); Enger, Prussia.
- CASUAROXYLON** Goeppert and Stache, 1855.
Casuaroxylon anglia Goeppert and Stache, in Stache, 1855, p. 42; locality and horizon unknown.
- CATENARIA** Sternberg, 1825.
Catenaria decora Sternberg, 1825 (1820-38), Tentamen, p. xxv, pl. 52, fig. 1; articulate? stem; Carboniferous.
- CATHAYSIOPTERIS** Koidzumi, 1934.
Cathaysiopteris whitei (Halle) Koidzumi, 1934, p. 113. For *Gigantopteris whitei* Halle, 1927, p. 173, pl. 47, figs. 1-9; Lower Shihhotse series, Lower Permian; Central Shansi, China.
- CATHISPERMUM** Reid and Chandler, 1933.
Cathispermum pulchrum Reid and Chandler, 1933, p. 317, pl. 14, figs. 23-28; fruit, Celastraceae; London Clay, Eocene; Sheppey, Kent, England.
- CAUDAEPHYLLUM** Achepohl, 1883.
Caudaephyllum longifolium Achepohl, 1883, p. 115; calamitean roots?; Upper Carboniferous; Westphalia.
- CAUDEX** Lesquereux, 1883.
Caudex spinosus Lesquereux, 1883, p. 91. For *Caulinites spinosa* Lesquereux, 1874, p. 115; stem, incertae sedis; Cretaceous; near Fort Harker, Kans.
- CAULERPIDES** Schimper, 1869.
Caulerpides pyramidalis (Sternberg) Schimper, 1869 (1869-74), p. 160. For *Caulerpites pyramidalis* Sternberg, 1833 (1820-38), p. 21, pl. 6, fig. 2. Justification for Schimper's claim to this genus is not clear, for it is admittedly based on Sternberg's *Caulerpites*.
- CAULERPITES** (Brongniart) Sternberg, 1833.
Caulerpites lycopodioides (Brongniart) Sternberg, 1833 (1820-38), p. 20. For *Fucoides lycopodioides* Brongniart, 1828 (1828a-38), p. 72, pl. 9, fig. 3.
- CAULINITES** Brongniart, 1828.
Caulinites parisiensis (Deslarest) Brongniart, 1828b, p. 115, leaf, monocotyledon. See also Cuvier and Brongniart, 1822, p. 234, pl. 8, fig. 10.
- CAULOMATITES** C. F. W. Braun, 1847.
Caulomatites zamites C. F. W. Braun, 1847, p. 85; nom. nud.
- CAULOMORPHA** Saporta, 1886-91.
Caulomorpha locardi Saporta, 1886-91, p. 83, pl. 236, fig. 2; stem impression, incertae sedis; Jurassic (Kimmeridgian); Orbagnoux, France.
- CAULOOPSIS** Gothan and Hartung, 1949.
Caulopsis punctata Gothan and Hartung, in Gothan, 1949, p. 27, pl. 3, figs. 4-6.
- CAULOPTERIS** Lindley and Hutton, 1832.
Caulopteris primaeva Lindley and Hutton, 1832 (1831-37), p. 121, pl. 42; tree-fern trunk impression; Upper Carboniferous; Radstock, near Bath, England. See also Posthumus, 1931.
- CAULOXYLON** Cribbs, 1939.
Cauloxylon ambiguum Cribbs, 1939, p. 440, figs. 1-24; petrified cordaitan stem; Reeds Spring limestone, Mississippian; Missouri.

CAXTONIA Reid and Chandler, 1933.

Caxtonia glandulosa Reid and Chandler, 1933, p. 265, pl. 10, figs. 17-19; carpel, Rutaceae?; London Clay, Eocene; Minster, Kent, England.

CAYEUXIA Frollo, 1938.

Cayeuxia moldavica Frollo, 1938, p. 269, pl. 1; calcareous alga; Upper Jurassic; eastern Carpathians.

CAYTONANTHUS Harris, 1937.

Caytonanthus arberi (Thomas) Harris, 1937; p. 40; microsporangiate organ, Caytoniales; Jurassic; Cayton Bay, Yorkshire, England. For *Antholithus arberi* Thomas, 1925, p. 327, pl. 14.

CAYTONIA Thomas, 1925.

Caytonia seawardi Thomas, 1925, p. 315, pls. 12, 13, 15; seed-bearing organ, Caytoniales; Middle Estuarine series, Middle Jurassic; Cayton Bay, Yorkshire, England.

CEDRELOPHYLLUM Deane, 1902.

Cedrelophyllum antiqua Deane, 1902a, p. 63, pl. 15, fig. 1; leaf, Meliaceae?; Tertiary; Wingello, New South Wales.

CEDRELOSPERMITES Saporta, 1894.

Cedrelospermites venulosus Saporta, 1894, p. 98, pl. 16, fig. 21; winged seed, dicotyledon; Cretaceous; Quinta-do-Lefriao, Portugal.

CEDRELOSPERMUM Saporta, 1889.

Cedrelopermum aquense Saporta, 1889, p. 93, pl. 18, fig. 11; winged weed, Cedrelaceae; Tertiary; Aix, Provence, France.

CEDRIPITES Wodehouse, 1933.

Cedripites eocenicus Wodehouse, 1933, p. 490, fig. 13; *Cedrus*-like pollen; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

CEDRITES R. W. Brown, 1935.

Cedrites primevus R. W. Brown, 1935, p. 445, fig. 11; mold of cone, possibly related to *Cedrus*; Lower Cretaceous; bank of Anacostia River, three-quarters of a mile beyond the District of Columbia line, Maryland.

CEDROIDITES Thiergart?, 1950.

Cedroidites sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 47.

CEDROPHLOIOS Fliche, 1896.

Cedrophloios breicheri Fliche, 1896, p. 258, pl. 12, fig. 4; pl. 14, fig. 3; petrified coniferous bark? Cretaceous (Albian); Villotte, France.

CEDROSTROBUS Stopes, 1915.

Cedrostrobus leckenbyi (Carruthers) Stopes, 1915, p. 143, fig. 39; cone, Coniferales; Lower Greensand, Cretaceous; Shanklin, Isle of Wight, England.

CEDROXYLON Kraus, 1870.

Cedroxylon withami Kraus, in Schimper, 1870 (1869-74), p. 370; Carboniferous; England. For *Peuce withami* Lindley and Hutton, 1831-33, p. 73, pls. 23, 24.

CELASTRINANTHIUM Conwentz, 1886.

Celastrinanthium hauchecornei Conwentz, 1886, p. 76, pl. 8, figs. 10-13; fruit, in amber, Celastraceae; early Tertiary; West Prussia.

CELASTRINITES Saporta, 1865.

Celastrinites venulosus Saporta, 1865, p. 52; leaf, Celastraceae; Tertiary; France. See also Saporta, 1868, p. 412, pl. 36, figs. 12, 13.

CELASTRINOXYLON Schenk, 1888.

Celastrinoxylon affine Schenk, 1888, p. 21; wood; Tertiary; Egypt; nom. nud.

CELASTROCARPUS E. W. Berry, 1930.

Celastrorcarpus eocenicus E. W. Berry, 1930, p. 97, pl. 25, figs. 26-29; capsule, Celastraceae; Wilcox group, Eocene; Saulsbury station, Hardeman County, Tenn.

CELASTROPHYLLUM Goeppert, 1854.

Celastrorphyllum attenuatum Goeppert, 1854, p. 52, pl. 14, fig. 89; leaf, Celastraceae; Tertiary; Java. See also *Celastrorphyllum attenuatum* Goeppert, 1853, p. 435; nom. nud.

CELLULOXYLON Dawson, 1881.

Celluloxylon primaevum Dawson, 1881b, p. 302. See also Dawson, in Penhallow, 1893a, p. 115, pl. 15, fig. 1; pl. 17, figs. 5, 6; pl. 18, figs. 7, 8; pl. 16, fig. 4. Earliest reference: Dawson, 1880a, p. 476; nom. nud.; Devonian; New York.

CELTIDOPHYLLUM Krasser, 1896.

Celtidophyllum prae australe Krasser, 1896, p. 130, pl. 16, figs. 8-14; leaf, Ulmaceae; Cretaceous; Kunstadt. This appears to be the correct citation for the type species although the presentation is confused. The caption to figures bears the name *Celtidophyllum cretaceum*. Earlier, Krasser (1889) gave the name *Celtidophyllum cretaceum* as a nom. nud.; in his "Register," 1896, p. 151, he indicates that *Celtidophyllum* = *Celtidophyllum*.

CELTIOPHYLLUM.

See *Celtidophyllum* Krasser.

CELTITIS Tuzson, 1909.

Celtitis kleinii Tuzson, 1909, p. 376; Pliocene; Balaton Lake, Sumeg, Hungary.

CELYPHINIA Mueller, 1871.

Celyphinia mccoysi Mueller, 1871 (1871-82), p. 40, pl. 5.

CENANGITES Meschinelli, 1892.

Cenangites piri (Ludwig) Meschinelli, in Saccardo, 1892, p. 775; fungus, Discomycete; central Germany. See also Meschinelli, 1898, p. 50, pl. 15, fig. 32.

CEPHALOPTERIS Nathorst, 1914.

Cephalopteris mirabilis Nathorst, in Bureau, 1914, p. 23, pl. 1 bis, figs. 3, 4, 4a; microsporangiate organ, Pteridospermeae; Upper Devonian; Ancenis, France. Earlier given as *Cephalopteris mirabilis* Nathorst, 1910, p. 277; nom. nud.

CEPHALOTAXITES Heer, 1883.

Cephalotaxites insignis Heer, 1883, p. 10, pl. 53, fig. 12; fertile (seed) shoot, Coniferales; Upper Cretaceous; Patoot, Greenland.

CEPHALOTAXOPSIS Fontaine, 1889.

Cephalotaxopsis magnifolia Fontaine, 1889, p. 236, pls. 104-108; foliage-bearing twigs, Coniferales; Potomac group, Lower Cretaceous; Fredericksburg, Va.

CEPHALOTAXOSPERMUM E. W. Berry, 1910.

Cephalotaxospermum carolinianum E. W. Berry, 1910a, p. 187; fruit, Taxaceae; Black Creek formation, Upper Cretaceous; Hale County, Ala.

CEPHALOTHECA Nathorst, 1902.

Cephalotheca mirabilis Nathorst, 1902a, p. 15, pl. 1, figs. 18-35; fern? (sporangial clusters borne on under side of rachis near junction with stem); Upper Devonian; Bear Island, Norway.

CERAMITES Liebmann, 1845.

Ceramites hisingeri Liebmann, in Forchhammer, 1845, p. 162; alga, Rhodophyceae; Silurian; Bornholm and Scania, Sweden.

CERAMITES Massalongo, 1859.

Ceramites sphacelarioides Massalongo, 1859b, p. 11. For *Monemites sphacelarioides* Massalongo, 1850, p. 24.

CERATONIOPHYLLUM Kirchheimer, 1930.

Ceratophyllum schottleri Kirchheimer, 1930b, p. 113, pl. 13, figs. 2a-d.

CERATOPHYCUS Schimper, 1879.

Ceratophycus bicornia Schimper, in Schimper and Schenk, 1879 (1879-90), p. 59; alga, Cylindritiaae.

CERATOPHYLLITES Unger, 1845.

Ceratophyllites faujasii (Brongniart) Unger, 1845 (1841-47), p. 77. For *Asterophyllites faujasii* Brongniart, 1822, p. 306; Eocene; Roche-Sauce, Vivarais, France.

CERATOSTROBUS Velenovsky, 1885.

Ceratostrobis sequoiaphyllum Velenovsky, 1885a, p. 24, pl. 12, figs. 14-16; foliage shoot and fragmentary cone; Cretaceous; Lipenec, Bohemia.

CERATOZAMITES Meschinelli, 1889.

Ceratozamites vicetinus Meschinelli, 1889, p. 9, pl. 6, figs. 1, 2.

CERCOSPORITES Salmon, 1903.

Cercosporites sp. Salmon, 1903, p. 128, figs. 6-9; fungus, Dematiaceae, Fungi Imperfecti; Miocene; Melilli, Italy.

CERCOSPORITES Stopes, 1913.

Cercosporites corioccocus (Bayer) Stopes, 1913, p. 276, fig. 24; fungus, Hyphomycetes; Perucur Beds, Upper Cretaceous; Vyserovic and Kounic, Bohemia.

CHAETHOMITES Pampaloni, 1902.

Chaethomites intricatus Pampaloni, 1902, p. 127, pl. 10, fig. 11; fungus perithecium; Miocene?; Sicily.

CHABAKOVIA Vologdin, 1939.

Chabakovia ramosa Vologdin, 1939, p. 256, pl. 2, fig. 4; pl. 12, fig. 3a; pl. 11, figs. 1, 2, 3a; small dendritic thallus, compared with *Epiphyton*; Middle Cambrian; South Urals.

CHAETOCCLADUS Whitfield, 1894.

Chaetocladus plumula Whitfield, 1894, p. 356, pl. 11, figs. 11-13; marine alga; Trenton group, Ordovician; Platteville, Wis.

CHAETOPHORITES Fliche, 1886.

Chaetophorites tertiaris Fliche, 1886, p. 353; Oligocene; Riedisheim near Mulhouse, France.

CHAETOSPHAERITES Felix, 1894.

Chaetosphaerites bilychnis Felix, 1894a, p. 272, pl. 19, fig. 4; fungus spores, compared with *Chaetosphaeria*; Eocene; Perekeschkul near Baku, Transcaucasia. Meschinelli, 1898, p. 17, erroneously attributes this genus to Tulasne.

CHAMAECYPARITES Endlicher, 1847.

Chamaecyparites hardtii (Goepfert) Endlicher, 1847, p. 277. For *Cupressites hardtii* Goepfert, 1837, p. 429; Oligocene; Bavaria. For illustrations, see Ettlinghausen, 1851, p. 157, pl. 23, fig. 18.

CHANGARNIERA Saporta, 1885.

Changarniera inquirenda Saporta, 1885, p. 1442; leaf, "proangiosperm"; Jurassic (Corallian); Auxey, France. See also Saporta, 1889 (1886-91), p. 246, pl. 265, figs. 1-3; pl. 266, figs. 1, 2.

CHANSITHECA Rege, 1920.

Chansitheca palaeosilvana Rege, 1920, p. 193, pl. 9, figs. 6, 7; fertile fern foliage; Carboniferous.

CHARACEITES Tuzson, 1914.

Characeites verrucosa Tuzson, 1914, p. 234, pl. 13, fig. 1; oogonium, Charophyta; Eocene; Estergom, Hungary.

CHARAXIS Harris, 1939.

Charaxis durstonense Harris, 1939, p. 67, pl. 16, fig. 10; vegetative organs, Characeae; Purbeck beds, Jurassic; Dorset, England. Harris lists six other species as new combinations with the comment: "As this is probably an artificial genus, it would be meaningless to select a type species."

CHARPENTIERIA Unger, 1845.

Charpentieria nivium Unger, 1845 (1841-47), p. xc; wood, Pliocene; Lemberg, Galicia, Austria.

CHASMATOPTERIS Zalesky, 1931.

Chasmatopteris principalis Zalesky, 1931b, p. 715, pls. 1, 2; petrified stem, Osmundaceae; Permian; Russia.

CHAUVINIOPSIS Saporta, 1872.

Chauvinopsis pellati Saporta, 1872a-73, p. 119, pl. 8, fig. 2; alga; Jurassic; Maninghen, near Wimille, France.

CHEILANTHITES Goeppert, 1836.

Cheilanthites mantelli (Brongniart) Goeppert, 1836, p. 231; sphenopterid foliage; Carboniferous; Tilgate Forest, Sussex, England. For *Sphenopteris mantelli* Brongniart, 1828a-38, p. 170, pl. 45, figs. 3-7.

CHEILOLEPTITES Saporta, 1861.

Cheileleptites dispersus Saporta, in Heer, 1861, p. 151; fern; Tertiary; nom. nud.

CHEIROLEPIS Schimper, 1870.

Cheirolepis münsteri (Schenk) Schimper, 1870 (1869-74), p. 248; coniferous twigs; Rhaetic; near Bayreuth, Bavaria.

CHEIROSTROBUS Scott, 1897.

Cheirostrobos pettycurensis Scott, 1897b, p. 421; petrified articulate cone; Calciferous Sandstone series, Lower Carboniferous; Pettycur, near Burntisland, Scotland. See also Scott, 1898b, pls. 1-6.

CHELEPTERIS Corda, 1845.

Chelepteris voltzii (Schimper and Mougeot) Corda, 1845, p. 76. For *Caulopteris voltzii* Schimper and Mougeot, 1844, p. 65, pls. 30-31; Triassic (Gres Bigarre); Gottenhausen, Alsace-Lorraine. See also Posthumus, 1931.

CHENOPODITES Saporta, 1889.

Chenopodites helicoides Saporta, 1889, v. 26, pl. 17, figs. 6, 7; seeds, Chenopodiaceae; Tertiary; Aix, Provence, France.

CHINLEA Daugherty, 1941.

Chinlea campii Daugherty, 1941, p. 45, pl. 4, fig. 4; stem, Osmundaceae; Chinle formation, Triassic; Arizona.

CHIROPTERIS Kurr, 1858.

Chiropteris digitata Kurr, in Bronn, 1858, p. 143, pl. 12; leaf, incertae sedis; Lettenkohlen-Sandstein, Triassic.

CHITOSPERMUM Harris, 1935.

Chitospermum stereococcus Harris, 1935, p. 134, pl. 29; seed, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

CHLAMIDOSTACHYS White, 1937.

Chlamidostachys chesterianus White, 1937, p. 38, pl. 8, figs. 11, 17-19, 21; cone impression, *Sphenophyllum* type?; Fayetteville shale, Mississippian; Bob Kidd Hollow, 3.2 miles southwest of Prairie Grove, Ark.

CHLAMYDOCARPUS Goeppert, 1864.

Chlamydocarpus palmaeformis Goeppert, 1864, p. 150, pl. 27, fig. 17; seed; Permian; near Braunau, Bohemia.

CHLOEPHYCUS Miller and Dyer, 1878.

Chloephycus plumosum Miller and Dyer, 1878, p. 3, pl. 4, fig. 1; incertae sedis; Cincinnati group, Silurian; Cincinnati, Ohio.

CHLORELLOPSIS Reis, 1923.

Chlorellopsis coloniata Reis, 1923, p. 107, pl. 3, figs. 1, 2, 9; pl. 4, figs. 3-6; pl. 5, figs. 2-6.

CHLOROTYLITES Howé, 1932.

Chlorotylites berryi Howe, 1932a, p. 220, figs. 1-3; silicified alga, Chlorophyceae; Sucarnooche clay, lower Eocene; Sumter County, Ala.

CHOFFATIA Saporta, 1894.

Choffatia francheti Saporta, 1894, p. 150, pl. 24, fig. 8; pl. 26, figs. 19-22; plant of *Salvinia*-like habit; Cretaceous; Portugal.

CHONDRIDES Schimper, 1869.

Chondrides furcatus (Brongniart) Schimper, 1869 (1869-74), p. 168, pl. 3, fig. 8.

CHONDRITES Sternberg, 1833.

Chondrites targionii (Brongniart) Sternberg, 1833 (1820-38), p. 25. For *Fucoides targionii* Brongniart, 1828a-38, p. 56, pl. 4, figs. 2-6; alga?; England.

CHONDROPHYTON Saporta and Marion, 1885.

Chondrophyton dissectum Saporta and Marion, 1885, p. 120, fig. 126; leaf, dicotyledon.

CHONDROPOGON Squinabol, 1890.

Chondropogon inorosolense Squinabol, 1890, p. 181, pl. 11, fig. 3; alga?; Tertiary; Morosolo, Italy.

CHORDITES Fliche, 1905.

Chordites lebruni Fliche, 1905a, p. 50, pl. 4, fig. 1; alga, Phaeophyceae?; Triassic (upper Muschelkalk); Meurthe-et-Moselle, France. Briefly described but no species cited in Fliche, 1903.

CHORDOPHYLLITES Tate, 1876.

Chordophyllites cicatricosus Tate, in Tate and Blake, 1876, p. 474, pl. 14, fig. 9; incertae sedis; Lower Jurassic (Lias); Old Nab, Staithes, Yorkshire, England.

CHORIONOPTERIS Corda, 1845.

Chorionopteris gleichenioides Corda, 1845, p. 90, pl. 54, figs. 10-16; petrified fern pinnales with synangia; Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

CHROOCOCCITES Reinsch, 1881.

Chroococcites sp. Reinsch, 1881, p. 48, pl. 11, figs. 11-28; pl. 7c, figs. 3, 5, 6; Upper Carboniferous; Mittelbexbach, Bavaria.

CHRSYDIOPTERIS Saporta, 1894.

Chrysodiopteris marchantiaeformis Saporta, 1894, p. 41, pl. 4, figs. 9, 17; fern foliage; Jurassic; Cabanas-de-Torres, Portugal.

CHRYSOTHECA Miner, 1935.

Chrysotheca diskoensis Miner, 1935, p. 590, pl. 18, figs. 1-10; perianth?, Jungermanniales; Upper Cretaceous; Amisut, Disco Island, Greenland.

CHUARIA Walcott, 1928.

Chuaria sp. Walcott, in White, 1928, p. 389; alga; pre-Cambrian; Grand Canyon, Ariz.

CIBOTIOCAULIS Ogura, 1927.

Cibotiocalis tateiwa Ogura, 1927, p. 364, pl. 3, figs. 13-15; pl. 7; petrified tree-fern stem, Cyatheaceae?; Lower Kyong-sang formation, Jurassic; Syong-jye Gun, North Kyong-sang Do, Korea.

CICATRICOSISPORITES Robert Potonie and Gelletich, 1933.

Cicatricosisporites dorogensis Robert Potonie and Gelletich, 1933, p. 522, pl. 1, figs. 1-5; Eocene; Dorog, Hungary.

CINCHONIDIUM Unger, 1850.

Cinchonidium racemosum Unger, 1850a, p. 430; fruit, Rubiaceae; Miocene; Radoboj, Croatia. *See also* Unger, 1865 (1860-65), p. 11, pl. 3, figs. 1, 2, 6.

CINGULARIA C. E. Weiss, 1871.

Cingularia typica C. E. Weiss, 1871, p. 138, pl. 14, fig. 4; fragment of articulate cone; Upper Carboniferous; Steinbachstollen, Rhenish Prussia. *See also* Renault, 1882, p. 144, and later works.

CINNAMOMIPHYLLUM Nathorst, 1888.

Cinnamomiphyllum sp. Nathorst, 1888, p. 9, pl. 1, figs. 7-11; leaf, dicotyledon; Tertiary; Japan.

CINNAMOMOPHYLLUM Kräusel and Weyland, 1950.

Cinnamomophyllum (Cinnamomum) scheuchzeri (Heer) Kräusel and Weyland, 1950, p. 68, pl. 11, fig. 7; pl. 16, figs. 1-6; pl. 17, figs. 1, 4-6; Tertiary; Regis mine near Altenburg, Germany.

CINNAMOMOIDES Seward, 1925.

Cinnamomoides newberryi (Berry) Seward, 1925, pl. C, fig. 29; Cretaceous; Atanikerdluk, Greenland.

CIRCIDOXYLON Platen, 1908.

Circidoxylon zirkeli Platen, 1908, p. 139, pl. 2, figs. 5, 6; wood; Tertiary; Nebraska.

CIRCOPOROXYLON Kräusel, 1949.

Circoporoxylon goepperti (Conwentz) Kräusel, 1949, p. 115. For *Glyptostroboxylon goepperti* Conwentz, 1885, p. 445; lower Oligocene; Katapuliche, Argentina. *See also* Kräusel, 1919b, p. 211.

CIRRATRIRADITES L. R. Wilson and Coe, 1940.

Cirratriradites maculatus L. R. Wilson and Coe, 1940, p. 183, pl. 1, fig. 7; spore; Des Moines group, Pennsylvanian; Green County coal mine, Franklin Township, Green County, Iowa.

CISSITES Debey, 1866.

Cissites aceroides Debey, in Capellini and Heer, 1866, p. 11, pl. 2, fig. 5.

CISSOPHYLLUM Ettingshausen, 1887.

Cissophyllum malvernium Ettingshausen, 1887b, p. 171, pl. 5, fig. 8; leaf fragment, Ampelideae; Eocene; Malvern Hills, New Zealand.

CISTELITES Heer, 1878.

Cistelites sachalinensis Heer, 1878c, p. 59, pl. 15, fig. 12; nom. nud; Miocene; Island of Sachalin, Mgratsch, Siberia.

CISTINOCARPUM Conwentz, 1886.

Cistinocarpum roemerii Conwentz, 1886, p. 59, pl. 6, figs. 10-15; fruit, in amber, Cistaceae; early Tertiary; west Prussia.

CISTOCARPUM Menzel, 1913.

Cistocarpum decemvalvulatum Menzel, 1913, p. 49, pl. 5, fig. 5; capsule, Cistaceae; Tertiary (Braunkohle); Germany.

CITROPHYLLUM E. W. Berry, 1909.

Citrophylllum aligerum (Lesquereux) E. W. Berry, 1909, p. 258, pl. 18a, figs. 1-8; leaf, compared with *Citrus*; Raritan formation, Upper Cretaceous; South Amboy, N. J.

CLADIOCARYA Reid and Chandler, 1926.

Cladiocarya foveolata Reid and Chandler, 1926, p. 77, pl. 4, figs. 22, 23; fruit, Cyperaceae; Bembridge beds, Oligocene; Isle of Wight, England.

CLADISCOTHALLUS Renault, 1896.

Cladiscothallus keppeni Renault, 1896a, p. 554, figs. 146, 147; alga?; Upper Devonian or Lower Carboniferous; Ryazan and Tula, Russia.

CLADISCUS Grand'Eury, 1877.

Cladiscus schnorrianus (Geinitz) Grand'Eury, 1877, p. 382. Generic name given but no species cited in Anonymous, 1872, p. 403.

CLADITES D. H. Scott, 1930.

Cladites bracteatus D. H. Scott, 1930, p. 342, figs. 1-12; petrified shoot, Cordaitales?; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

CLADOCEDROXYLON Felix, 1882.

Cladocedroxylon auerbachii (Ludwig) Felix, 1882b, p. 265, pl. 2, fig. 5. For *Pinus auerbachii* Ludwig, 1863, p. 275, pl. 46, figs. 5-7; Permian; Lithwinsk, etc., Perm [Molotov], Russia.

CLADOCUPRESSOXYLON Felix, 1882.

Cladocupressoxylon protolarix Felix, 1882a, p. 46; coniferous wood; Oligocene.

CLADOPHLEBIDIUM Sze, 1931.

Cladophlebidium wongi Sze, 1931, p. 4, pl. 2, fig. 4.

CLADOPHLEBIS Brongniart, 1849.

Cladophlebis albertsii (Dunker) Brongniart, 1849, p. 107. For *Neuropteris albertsii* Dunker, 1846, p. 8, pl. 7, fig. 6; fernlike foliage; Wealden?; Germany.

CLADOPHORITES Reiss, 1923.

Cladophorites dubius Reiss, 1923, p. 116, pl. 5, figs. 14, 15.

CLADOSPORITES Felix, 1894.

Cladosporites bipartitus Felix, 1894a, p. 276, pl. 19, fig. 1; fungus conidia, compared with *Cephalothecium* and *Cladosporium*; Eocene; Pereckeschkul near Baku, Transcaucasia. This genus erroneously attributed to Link by Meschinelli, 1898, p. 80.

CLADOSTROBUS Zalesky, 1918.

Cladostrobos lutugini Zalesky, 1918, p. 7, pl. 54, figs. 6, 6a; incertae sedis; Carboniferous; near village Vasskino, Kuznets Basin, Russia.

CLADOTHECA Halle, 1911.

Cladotrocha undans (Lindley and Hutton) Halle, 1911a, p. 4, pls. 1, 2; fertile fern frond, Osmundaceae or Schizaeaceae?; Jurassic; Gristhorpe Bay, Yorkshire, England.

CLADOTHRICINIUM Zalesky, 1915.

Cladotrichinium pancratovi Zalesky, 1915, p. 55, pl. 10, figs. 1, 2; Trichobacterinae?; Carboniferous; Russia.

CLADOTHRYS Renault, 1899.

Cladotryx martyi Renault, 1899, p. 894, figs. 3-6, 29, 30; pl. 8, figs. 7, 8; bacteria; Pleistocene; Aulne, France.

CLADOXYLON Unger, 1856.

Cladoxylon mirabile Unger, 1856, p. 178, pl. 12, figs. 6, 7; pteridosperm?; stems with complex stellar organization; Upper Devonian; Saalfeld, Thuringia. This binomial first used by Unger, 1854a; nom. nud.

CLASTERIA Dana, 1849.

Clasteria australis Dana, 1849, p. 719, pl. 14, figs. 3-5; Upper Carboniferous; New South Wales.

CLASTEROSPORITES Pia, 1927.

Clasterosporites eocaenicus (Fritel and Viguier) Pia, in Hirmer, 1927, p. 123, ber), Cistaceae; early Tertiary; west fig. 113; Dematiaceae, Fungi Imperfecti, in rhizome of *Equisetum noviodunense*; Eocene.

CLATHRARIA Brongniart, 1822.

Clathraria brardii Brongniart, 1822, p. 222, pl. 12, fig. 5; sigillarian stem fragment; Upper Carboniferous; Terrasson, Dépt. Dordogne, France.

CLATHROPHYLLUM Heer, 1862.

Clathrophyllum meriani (Brongniart) Heer, in Müller, Albrecht, 1862, p. 54. See also Heer, 1864-65, p. 54, pl. 2, fig. 10; Upper Triassic (Keuper); Rütihard, Switzerland.

CLATHROPODIUM Saporta, 1873-75.

Clathropodium trigeri Saporta, 1873c-75, p. 288, pl. 122, figs. 1-3; petrified cycadophyte trunk; Jurassic; Sarthe, France.

CLATHROPTERIS Brongniart, 1828.

Clathropteris meniscioides Brongniart, 1828b, p. 62, fern foliage; Lower Jurassic (Lias)?; Scania, Sweden. See also Brongniart, 1828-38, p. 380, pl. 134.

CLAUSENISPERMUM Reid and Chandler, 1933.

Clausenispermum dubium Reid and Chandler, 1933, p. 264, pl. 10, figs. 15, 16; seed, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.

CLAVATOR Reid and Groves, 1924.

Clavator reedii Groves, 1924, p. 116; Characeae; Purbeck beds, Jurassic; Dorset, England. See also *Clavator* sp. Reid and Groves, 1916, p. 252, pl. 8.

CLAVIJOPSIS Schindehutte, 1907.

Clavijopsis staubi Schindehutte, 1907, p. 62, pl. 12, figs. 2a-c.

CLEMENTSIELLA Elias, 1942.

Clementsella laminarum (Cockerell) Elias, 1942, p. 103, pl. 4, figs. 3, 4; grass fruit; upper Oligocene or lower Miocene; Florissant, Colo.

CLEPSYDROPSIS Unger, 1856.

Clepsydropsis antiqua Unger, 1856, p. 165, pl. 7, figs. 1-13; coenopterid fern petiole; Upper Devonian; Saalfeld, Thuringia. This binomial given by Unger, 1854; nom. nud. For later accounts, see Hirmer, 1927; Sahni, 1928, 1932b.

CLETHRAECARPUM Menzel, 1913.

Clethraecarpum asepalum Menzel, 1913, p. 55, pl. 5, figs. 27, 28; fruit, Clethraceae; Tertiary (Braunkohle); Germany.

CLEVEA Crie, 1889.

Clevea americana Crie, 1889b, p. 23; nom. nud.

CLIMACIOPHYTON Steinmann and Elberskirch, 1929.

Climaciophyton trifoliatum Steinmann and Elberskirch, 1929, p. 49, pl. 2, fig. 3.

CLOSTEROXYLON Hartig, 1848.

Closteroxylon lindleyanum Hartig, 1848a, p. 170; wood; Tertiary; Germany.

CLOUGHTONIA Halle, 1911.

Cloughtonia rugosa Halle, 1911b, p. 2, pls. 1-2; cycadophyte? leaflets; Jurassic (Middle Estuarine shales); Cloughton Wyke, Yorkshire, England.

CLUSIAPHYLLUM E. W. Berry, 1930.

Clusiaphyllum eocenicum E. W. Berry, 1930, p. 113, pl. 18, fig. 2; leaf fragment, Guttiferae; Wilcox group, Eocene; Nevada County, Ark.

CLYPEINA Michelin, 1845.

Clypeina marginoporella Michelin, 1845 (1840-47), p. 177, pl. 46, fig. 27; alga, Dasycladaceae; Upper Cretaceous; near d'Étampes (Seine-et-Oise), France.

COCOLOBITES Visiani, 1858.

Coccolobites massalongiana Visiani, 1858, p. 440, pl. 4, fig. 1; Eocene; Monte Promina, Italy.

COCOLOBITES E. W. Berry, 1916.

Coccolobites cretaceus E. W. Berry, 1916a, p. 830, pl. 68, fig. 1; leaf, Polygonaceae; Magothy formation, Upper Cretaceous; Grove Point, Cecil County, Md. See also Berry, 1914b, p. 298; nom. nud.

COCOPLASMIUM Reinsch, 1881.

Cocoplasmium sp. Reinsch, 1881, p. 31, pl. 7, figs. 3-10; pl. 7a, figs. 1-3; Upper Carboniferous; Mittelbronn, Württemberg.

COCULITES Heer, 1874.

Coculites kanii Heer, 1874b, p. 21; Menispermaceae; Miocene; Greenland; nom. nud.

COCULOPHYLLUM Velenovsky, 1889.

Cocculophyllum cinnamomeum Velenovsky, 1889, p. 54. For *Cocculus cinnamomeus* Velenovsky, 1885a, p. 65, pl. 8, figs. 16-21; Upper Cretaceous; Lipenec, Bohemia.

COCHLIOCARPUS Visiani, 1858.

Cochliocarpus scorpiuroides Visiani, 1858, p. 44, pl. 2, fig. 6; Eocene; Monte Promina, Italy.

COCITES Bronn, 1838.

Cocites sp. Bronn 1838 (1837-38), p. 861; palm? fruits.

COCOOPSIS Fliche, 1896.

Cocoopsis zeilleri Fliche, 1896, p. 271, pl. 12, figs. 5, 6; pl. 13, figs. 1, 2; seed, Palmaceae; Cretaceous; Argers and Chaudfontaine, near Ste. Meneshould, France. See also *Cocoopsis* sp. Fliche, 1894, p. 889.

CODITES Sternberg, 1833.

Codites serpentinus Sternberg, 1833 (1820-38), p. 20, pl. 3, fig. 1; incertae sedis; Jurassic; Solenhofen, Bavaria.

CODONOPHORA Massalongi, 1857.

Codonophora turbinata (Brongniart) Massalongi, 1857b, p. 778. For *Fucoides turbinatus* Brongniart, 1823, p. 314, pl. 20, fig. 1; Eocene; Monte Bolca, Italy.

CODONOPHYCUS Fenton and Fenton, 1939.

Codonophycus austinii Fenton and Fenton, 1939, p. 113, pl. 11, figs. 1-3; alga; Madison formation, Mississippian; Horse Creek, Bald Mtn. quadrangle, Big Horn Mts., Wyo.

CODONOPHYTON Northorst, 1902.

Codonophyton epiphyticum Northorst, 1902a, p. 45, pl. 8, figs. 1, 2; pl. 13, figs. 9-15; incertae sedis; Upper Devonian; Bear Island, Norway.

CODONOSPERMUM Brongniart, 1874.

Codonospermum anomalum Brongniart, 1874, p. 258, pl. 23, figs. 9-12; silicified seed; Carboniferous; St.-Étienne, France.

CODONOTHECA Sellards, 1903.

Codonotheca caduca Sellards, 1903, p. 90, pl. 8; pteridosperm microsporangiate organ; Pennsylvanian; Mazon Creek, Ill.

COELOSPHAERIDIUM Roemer, 1885.

Coclosphaeridium cyclocrinophilum Roemer, 1885, p. 57, pl. 27, fig. 1.

COENOXYLON.

Error in Seward, 1917, p. 293, for *Caenoxylon*, Zalesky.

COLACITES Reinsch, 1881.

Colacites sp. Reinsch, 1881, p. 70, pl. 16, fig. 1; pl. 16a, figs. 6-8; Upper Carboniferous; Zwickau, Saxony.

COLEOPHYLLITES Grand'Eury, 1877.

Coleophyllites zaeiformis Grand'Eury, 1877, p. 39, calamitean foliage?; Carboniferous; Beraudiere, Loire, France. For *Poacites zaeiformis* Schlotheim, 1820, p. 416, pl. 26, fig. 2.

COLLENELLA J. H. Johnson, 1942.

Collenella guadalupensis J. H. Johnson, 1942, p. 212, pl. 7, fig. 3; lime-secreting alga; Yates sandstone, Permian; south side Dark Canyon, Guadalupe Mts., N. Mex.

COLLENIA Walcott, 1914.

Collenia undosa Walcott, 1914, p. 113, pl. 13, figs. 1, 2; pl. 14, figs. 1, 2; alga; Beltian series, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

COLOMBRICARPUS E. M. Reid, 1933.

Colombicarpum biloculare E. M. Reid, 1933, p. 212, pl. 14, figs. 10-13; fruit, Anacardiaceae; Tertiary; Colombia.

COLPODEXYLON Banks, 1944.

Colpodexylon deatsii Banks, 1944, p. 651, figs. 1-15, 17, 19, 21, 24, 25; lycopod with lobed xylem strand and three-forked leaves; Delaware River flags, lower Upper Devonian; 1 mile south-east of Pond Eddy, Sullivan County, N. Y.

COLPOSPERMUM Renault, 1890.

Colpospermum sulcatum Renault, in Renault and Zeiller, 1890, p. 653, pl. 72, figs. 63-66; seed; Carboniferous; Commeny, France.

COLPOXYLON Brongniart, 1849.

Colpoxyylon aeduense Brongniart, 1849, p. 109. See also Renault, 1880, p. 78, pl. 11, fig. 8; and Renault, 1896, p. 299; petrified stem, Medulloseae; Permian; Autun, France.

COLUMNARIA Sternberg, 1825.

Columnaria intacta Sternberg, 1825, (1820-38), Tentamen, p. xxv.

COLYMBETES Stopes, 1915.

Colymbetes edwardsi Stopes, 1915, p. 314, pls. 31, 32; petrified cycadophyte trunk; Lower Greensand, Cretaceous; locality unknown.

COLYMBOSXYLON Hartig, 1848.

No species assigned but apparently intended as *Colymbosylon cretacea* (Corda) Hartig, 1848a, p. 140. For *Peuce cretacea* (Corda) Endlicher, 1847, p. 296. For *Pinus cretacea* Corda, in Reuss, 1845-46, p. 91, pl. 47, figs. 1-6.

COMATES Reinsch, 1881.

Comates sp. Reinsch, 1881, p. 92, pl. 31a, figs. 8-10; Upper Carboniferous; England.

COMBRETACINIUM Felix, 1894.

Combretacinium quisqualoides Felix, 1894a, p. 90, pl. 10, fig. 1; compared with *Quiaqualis pubescens*; Sumgait series, Eocene; Caucasus.

COMBRETANTHITES E. W. Berry, 1913.

Combretanthites eocenica E. W. Berry, 1913, p. 262, pl. 21; flower, Combretaceae; Wilcox group, Eocene; Grand Junction, Fayette County, Tenn.

COMBRETIPHYLLUM Menzel, 1909.

Combretiphyllum acuminatum Menzel, 1909, p. 402, pl. 2, fig. 7; leaf fragment, Anonaceae or Moraceae?; lower Tertiary; Kamerun, Africa.

COMEPHYLLUM Emmons, 1857.

Comephyllum cristatum Emmons, 1857, p. 128, fig. 97; incertae sedis; Triassic; Chatham County, N. C.

COMIA Zalesky, 1934.

Comia pereborensis Zalesky, 1934b, p. 268, figs. 44, 45; fernlike foliage; Permian; Pechora basin, Russia.

COMIPTERIDIUM Zalesky, 1934.

Comipteridium dobroljubovae Zalesky, 1934b, p. 253, fig. 22; fern?; frond fragment; Permian; Pechora basin, Russia.

COMMELINACITES Caspary, 1881.

Commelinacites dichorisandroides Caspary, 1881, p. 29.

COMPSOPTERIS Zalesky, 1934.

Compsopteris adzvensis Zalesky, 1934b, p. 264, figs. 38, 39; alethopterid foliage; Permian; Pechora basin, Russia.

COMPSOTESTA (Brongniart) Bertrand, 1910.

Compsotesta brongniarti Bertrand, 1910, p. 189, pl. 14; petrified seed; Carboniferous; Grand Croix, France.

COMPSOXYLON Zalesky, 1927.

Compsoxylon monteverdei Zalesky, 1927a, p. 46, pl. 29, figs. 8-10; Permian; Samara, southeast Russia.

COMPTONIOPTERIS Marion, 1890.

Comptoniopteris provincialis Marion, 1890, p. 1053; Polypodiaceae; Cretaceous; Martigues, France. First species illustrated: *Comptoniopteris cercalina* Saporta, 1894, p. 129, pl. 26, fig. 24.

COMPTONIPHYLLUM Nathorst, 1888.

Comptoniphyllum naumanni Nathorst, 1888, p. 202, pl. 18, fig. 2; leaf, compared with *Myrica*; Miocene; Moriyo-shimura, Senbokugori, Ugo province, Japan.

COMPTONITES Hisinger, 1837.

Comptonites antiquus (Nilsson) Hisinger, 1837, p. 111. See also Stur, 1863, p. 57, fig. 7.

COMPTOSPERMUM Grand'Eury, 1877.

Comptospermum jarensse (Brongniart) Grand'Eury, 1877, p. 184; seed; Carboniferous; France.

CONCHOCARYON Mueller, 1879.

Conchocaryon smithii Mueller, 1879 (1871-82), p. 39, pl. 17, figs. 4, 5; Pliocene; Gulgong, Australia.

CONCHOPHYLLUM Schenk, 1883.

Conchophyllum richthofeni Schenk, 1883c, p. 223, pl. 42, figs. 21-26; foliage shoots, Corallitales?; Carboniferous; Kai-ping in Tshili, China.

CONCHOPTERIS.

Probably error for *Lonchopteris*, in Britton, 1862, p. 20.

CONCHOTHECA Mueller, 1873.

Conchotheca rotundata Mueller, 1873 (1871-82), p. 41, pl. 6, figs. 9-11; Pliocene; Nintingbool, Victoria, Australia.

CONCHYOPHYCUS Saporta, 1872.

Conchyophycus marcignyanus Saporta, 1872a-73, p. 151, pl. 11; alga; Jurassic; Marcigny-sous-Thil, France.

CONDRUSIA Stockmans, 1946.

Condrusia rumex Stockmans, 1946a, p. 1, fig. 2; Upper Devonian; Belgium. For full account, see Stockmans, 1948, p. 57, pl. 11, figs. 4-12.

CONDYLITES Thistleton-Dyer, 1872.

Condylites squamatus Thistleton-Dyer, 1872, p. 195, pl. 5, fig. 7; coniferous twig?; Jurassic; Solenhofen, Bavaria.

CONFERVITES Brongniart, 1828.

Confervites thoreaeformis Brongniart, 1828 (1828a-38), p. 86, pl. 9 bis, figs. 3-4; alga?; Tertiary; Monte Bolca, near Verona, Italy.

CONFEROVIDES Jaeger, 1827.

Confervoides arenaceus Jaeger, 1827, p. 34, pl. 8, fig. 2; alga?; Upper Triassic (Keuper); Ilsfeld, Württemberg.

CONIFERITES Unger, 1839.

Coniferites lignitum Unger, 1839b, p. 13; Miocene; Peggau, Styria. Apparently only species illustrated is *Coniferites? verticillatus* Tate in Johnston, 1853, p. 309, pl. 13, figs. 8, 8a; articulate stem impression?; Upper Carboniferous; Lammerton, England. Doubtful that these two species are closely related.

CONIFEROCAULON Fliche, 1900.

Coniferoaulon colymbeaeforme Fliche, 1900, p. 16, figs. 1-3 [unnumbered plate]; stem, Coniferales; Cretaceous; France.

CONIFEROMYELON Fliche, 1908.

Coniferomyelon conchylium Fliche, 1908, p. 211, pl. 18, figs. 2-3; stem cast, Coniferales?; Triassic; Meurthe-et-Moselle, France.

CONIFEROXYLON G. F. Beck, 1945.

Coniferoxylon krausci (Felix) G. F. Beck, 1945, p. 94; a genus established for "anomalous" coniferous wood.

CONIOPTERIS Brongniart, 1849.

Coniopteris murrayana Brongniart, 1849, p. 75. For *Pecopteris murrayana* Brongniart, 1828a-38, p. 358, pl. 126, figs. 1-5; fernlike foliage; Jurassic; Scarborough, Yorkshire, England.

CONTITES Sternberg, 1823.

Contites bucklandi Sternberg, 1823 (1820-38), p. 39, pl. 30; cone, Coniferales?

CONNARACANTHIUM Conwentz, 1886.

Connaracanthium roureoides Conwentz, 1886, p. 104, pl. 10, figs. 17-21; inflorescence (in amber), Connaraceae; early Tertiary; West Prussia.

CONNAROPHYLLUM Ettingshausen, 1903.

Connarophyllum crassinervium Ettingshausen, in Krasser, 1903, p. 858; nom. nud.

CONOCARPITES E. W. Berry, 1919.

Conocarpites formosus E. W. Berry, 1919a, p. 127, pl. 28, fig. 9; leaf, Combretaceae; Tuscaloosa formation, Upper Cretaceous; Glen Allen, Fayette County, Ala.

CONOPHOROIDES Koenig, 1825.

Conophoroides anthemis Koenig, 1825, pl. 16, fig. 200; no description; later transferred to *Lepidostrobus anthemis* (Koenig) Kidston, 1886, p. 197.

CONOPHYTON Maslov, 1937.

Conophyton lituus Maslov, 1937b, p. 344, pl. 4, figs. 2, 3; calcareous alga?; Lower Cambrian; Aldan River, western Baikal, USSR.

CONOSPERMITES Ettingshausen, 1867.

Conospermities hakeaeifolius Ettingshausen, 1867, p. 254, pl. 3, figs. 4, 12; leaf, Proteaceae; Upper Cretaceous; Niederschoena, Saxony.

CONOSPERMOPHYLLUM Velenovsky, 1889.

Conospermophyllum hakeaeifolium Velenovsky, 1889, p. 53.

CONOSTICHUS Lesquereux, 1876.

Conostichus ornatus Lesquereux, 1876a, p. 142, pl. 1, fig. 6; incertae sedis; Pennsylvanian; Indiana.

CONOSTOMA Williamson, 1876.

Conostoma oblonga Williamson, 1876a, p. 71; seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 268, pl. 12, figs. 80, 81, 86.

CONSTANTINIUM Unger, 1863.

Constantinium proteoides Unger, in Tschihatchef, 1863, p. 517; wood, Proteaceae; Tertiary; Lake Derkos, Thrace. See also Tschihatchef, 1866, p. 322, pl. 17, figs. 1, 2.

CONVALLARITES Brongniart, 1828.

Convallarites erecta Brongniart, 1828d, p. 455, pl. 19; articulate stem and leaves?; Triassic; Sultz-les-Bains, near Strasbourg.

COOKSONIA Lang, 1937.

Cooksonia pertoni Lang, 1937, p. 250, pl. 8, figs. 4-19; pl. 9, figs. 20-27; small leafless plant, Psilophytales?; Devonian, Perton Quarry, Saltwells, South Pembrokeshire, England.

COPIAPAEA Solms-Laubach, 1899.

Copiapaea plicatella Solms-Laubach, 1899, p. 594, pl. 13, figs. 8-11; leaf fragments; Rhaetic; La Tenera, Chile.

COPPERIA Walcott, 1914.

Copperia tubiformis Walcott, 1914, p. 110, pl. 19, figs. 1-3; alga; Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

COPROSMAEPHYLLUM Deane, 1904.

Coprosmaephyllum ovatum Deane, 1904, p. 212, pl. 20, figs. 1-3; leaf, compared with *Coprosma*; Tertiary; Sentinel Rock, Otway Coast, Victoria.

COPROSMITES Hector, 1880.

Coprosmites oblongifolia Hector, 1880, p. 49; nom. nud.

CORALLINITES Unger, 1847.

Corallinites arbuscula Unger, 1847 (1841-47), p. 127, pl. 39, fig. 6; alga?; Jurassic; Pechgraben near Weiher, Austria.

CORAPHYTON Steinmann and Elberskirch, 1929.

Coraphyton problematicum Steinmann and Elberskirch, 1929, p. C59, fig. 22, pl. 2, figs. 9, 10; Lower Devonian; Wahnbahtals near Sieburg, Germany.

CORCHORITES Ettingshausen and Gardner, 1879.

Corchorites quadricostatus Ettingshausen and Gardner, in Ettingshausen, 1879, p. 395; nom. nud.

CORCHORITES Deane, 1902.

Corchorites crenulata Deane, 1902a, p. 62, pl. 17, fig. 1; leaf, compared with *Corchorus cunninghamii*; Tertiary; Wingello, New South Wales.

CORDAIANTHOPSIS Fliche, 1910.

Cordaianthopsis minieri Fliche, 1910, p. 267, pl. 27, fig. 2; inflorescence, Cordaitales?; Triassic; Haute-Saone, Vosges, France.

CORDAIANTHUS Grand'Eury, 1877.

Cordaianthus gemmifer Grand'Eury, 1877, p. 228, pl. 26, figs. 4-7; inflorescence, Cordaitales; Carboniferous; France.

CORDAICARPON H. B. Geinitz, 1862.

Cordaicarpon cordai H. B. Geinitz, 1862, p. 150. For *Carpolithes cordai* Geinitz, 1855, p. 41, pl. 2, figs. 7-16; seed compressions, thought by Geinitz to be seed of *Cordaites principatis*; Upper Carboniferous; Zaukerode, Saxony. See also Seward, 1917, p. 334, 338. Spelling *Cordaicarpus* adopted by many later writers.

CORDAICARPUS.

See *Cordaicarpon*.

CORDAICLADUS Grand'Eury, 1877.

Cordaicladus subschnorrianus Grand'Eury, 1877, p. 243, pl. 28, figs. 1, 2; Cordaite stem cast; Carboniferous; France.

CORDAIFLOYOS Grand'Eury, 1877.

Cordaifloyos sp. Grand'Eury, 1877, p. 250; stem impression, Cordaitales; Carboniferous; France.

CORDAIOPSIS Renault, 1896.

Cordaiopsis elliptica Renault, 1896a, p. 344, pl. 86, figs. 12, 13; vegetative bud, Cordaitales?; Carboniferous; Les Chevrots, France.

CORDAIPHLOEUM Grand'Eury, 1877.

Cordaiophloeum sp. Grand'Eury, 1877, p. 509; nom. nud.

CORDAISPERMUM Renault, 1881.

Cordaispermum gutbieri (Geinitz) Renault, 1881, p. 103, pl. 14, fig. 7; seed, Cordaitales; Upper Carboniferous; St.-Etienne, France. See also Seward, 1917, p. 335.

CORDAISTROBUS Lesquereux, 1878.

Cordaiastrobus grand'euryi Lesquereux, 1878b, p. 328; Pennsylvanian; Cannelton, Beaver County, Pa. See also Lesquereux, 1879, pl. 82, figs. 3, 4a.

CORDAITANTHUS Ottokar Feistmantel, 1876.

Cordaitanthus communis Ottokar Feistmantel, 1876c, p. 272, pl. 61, figs. 1-4; inflorescence, Cordaitales.

CORDAITES Unger, 1850.

Cordaites borassifolia (Sternberg) Unger, 1850a, p. 277. For *Flabellaria borassifolia* Sternberg, 1822 (1820-38), p. 32, pl. 18; foliage; Upper Carboniferous; Swina, Bohemia. [*Flabellaria borassifolia* later was changed to *Pychnophyllum borassifolia* by Brongniart (1849) after Corda had shown that it was not a palm. Thus both *Pychnophyllum* and *Cordaites* are based

on the same specimen and Seward, 1917, p. 223, notes: "It has recently been proposed to revive the forgotten designation *Pychnophyllum*, but the reasons given are hardly likely to induce botanists to discard the familiar generic name which perpetuates the memory of Corda."]

CORDAIXYLON Grand'Eury, 1877.

Cordaixylon sp. Grand'Eury, 1877, p. 257. First? illustrated account is for *Cordaioxylon credneri* Morgenroth, 1883, p. 306, pls. 3, 4. Note misspelling of generic name here.

COREMATOCLADUS Ruedemann, 1909.

Corematocladus densa Ruedemann, 1909, p. 206, pl. 3, figs. 1-5; alga, Florideae?; Trenton limestone, Ordovician; Glen Falls, N. Y.

CORMARAUCARIOXYLON Lignier, 1907.

Cormaraucarioxylon crasseradiatum Lignier, 1907, p. 305; pl. 20, figs. 53-57; pl. 21, figs. 62-64, 69; pl. 23, fig. 82; coniferous wood; Upper Jurassic (Oxfordian); Trouville, France.

CORMOCEDROXYLON Felix, 1882.

Cormocedroxylon jurense (Rouillier and Fahrenkohl) Felix, 1882b, p. 264; coniferous wood; Jurassic; Khorochovo, Russia.

CORMOCORDAITES Grand'Eury, 1890.

Cormocordaites sp. Grand'Eury, 1890, p. 314, pl. 7, fig. 11; partly petrified cordaitean stem; Upper Carboniferous; St.-Etienne, France.

CORMOCUPRESSINOXYLON.

Cormocupressinoxylon ucranicum, in Hofmann, 1884b, p. 171. Mistake? or emended spelling for *Cormocupressoxylon ucranicum* (Goeppert) Felix, 1882b, p. 267.

CORMOCUPRESSOXYLON Felix, 1882.

Cormocupressoxylon protolaria Felix, 1882a, p. 46; coniferous wood; Oligocene.

CORNOPHYLLUM Newberry, 1895.

Cornophyllum vetustum Newberry, 1895, p. 119, pl. 19, fig. 10; leaf, Cornaceae; Cretaceous; Woodbridge, N. J.

CORNOXYLON Conwentz, 1882.

Cornoxyylon erraticum Conwentz, 1882, p. 157, wood; Pleistocene (erratic derived from an earlier formation); Holstein. See also Conwentz, in Vater, 1884, p. 846, pl. 29, fig. 27.

CORNUCARPUS E. A. N. Arber, 1914.

Cornucarpus acutum (Lindley and Hutton) E. A. N. Arber, 1914, p. 89, pl. 6, fig. 14; platyspermic seed; Carboniferous.

CORONELIA Florin, 1940.

Coronelia molinae Florin, 1940c, p. 20, pl. 3, figs. 3-10; pl. 4, figs. 1-8; pl. 5, figs. 1-4; Eocene; Coronel, Dept. Coronel, Chile.

CORTICITES Rossmassler, 1840.

Corticites lenticellosus Rossmassler, 1840, p. 41, pl. 12, fig. 56; Miocene; Altsattel, Bohemia.

CORYDOPODIUM Derville, 1931.

Corydopodium pruvosti Derville, 1931, p. 63, pl. 5, figs. 17, 18; pl. 6, figs. 20-24; pl. 7, figs. 25-28; pl. 9, figs. 33, 34; alga, Myxophyceae; Carboniferous; Bas-Boulonnais, France.

CORYLIPOLENITES Robert Potonie, 1934.

Corylipollenites coryphaeus Robert Potonie, 1934, p. 53, pl. 2, fig. 10; pollen, Betulaceae; Miocene.

CORYLITES J. S. Gardner, 1887.

Corylites macquarrii (Forbes) J. S. Gardner, 1887, p. 290, pl. 15, fig. 3; *Corylus*-like leaf; Miocene; Atanekerdruk, Isle of Mull, Scotland.

CORYLOIDITES Thiergart, 1950.

Coryloidites sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 53, pl. C, fig. 18; pollen, Betulaceae; Pliocene; Lippe; no description.

CORYLOPSITES Mathiesen, 1932.

Corylopsites groenlandicus Mathiesen, 1932, p. 16, figs. 5-10; wood, compared with *Corylopsis*; early Tertiary; Cape Dalton, east Greenland.

CORYNECARPUS C. F. W. Braun, 1840.

Corynecarpus grandis C. F. W. Braun, 1840, p. 105, nom. nud.

CORYNEPTERIS Baily, 1860.

Corynepteris stellata Baily, 1860, p. 238, pl. 21, figs. 1a-c; fragment of fertile fern-like frond; Carboniferous; Ballygiltenan Lower, near Glin, County Limerick, Ireland.

CORYNOPHYLLITES Zalesky, 1937.

Corynophyllites setiformis Zalesky, 1937b, p. 43, fig. 6; stem-bearing filiform foliage, Equisetales; Permian; Russia.

COSELEYA Kidston, 1914.

Coseleya glomerata Kidston, 1914, p. 97, pl. 5, figs. 4, 4a, 5, 6; pl. 10, fig. 4; fertile frond fragment, Pteridospermae?; "Ten-foot Ironstone Measures," Upper Carboniferous; Cosely near Dudley, Staffordshire, England.

COSTARITES Debey, 1848.

Costarites undulatus Debey, 1848, p. 115; nom. nud.

COTTAEA Goeppert, 1836.

Cottaea danacoides Goeppert, 1836, p. 452; Upper Triassic (Keuper); Stuttgart, Württemberg. For illustrations Goeppert refers to Jaeger, 1827, pl. 7, fig. 6. See also Posthumus, 1931.

COTTAITES Unger, 1842.

Cottaites lapidarium Unger, 1842b, p. 176; wood, Leguminosae; Tertiary; Gleichenberg, Styria. See also Unger, 1854b, p. 182, pl. 7, figs. 1-3. This species removed to *Ulmium* by Edwards, 1931, leaving type species (?) as *Cottaites robustior* Unger, 1842b, p. 176.

CRANMERIA Reid and Chandler, 1933.

Cranmeria trilocularis Reid and Chandler, 1933, p. 424, pl. 22, figs. 22-28; fruit, Lythraceae?; London Clay, Eocene; Minster, Kent, England.

CRASPEDOSPERMA Zalesky, 1937.

Craspedosperma bardacanum Zalesky, 1937b, p. 87, fig. 58, seed; Permian; Matveyevo, USSR.

CRASSULITES? Laurent, 1899.

Crassulites sp. Laurent, 1899, p. 145, pl. 14, figs. 31, 31a; stem and foliage compared with *Sedum*; Tertiary; Celas, France.

CRATOPELEURA Weber, 1892.

Cratopleura holsatica Weber, 1892, p. 128, pls. 4, 5; seed, Nymphaeaceae; Interglacial.

CREDNERIA Zenker, 1833.

Credneria integerrima Zenker, 1833a, p. 17, pl. 2, fig. F; leaf, dicotyledon; Upper Cretaceous; Blankenburg, Germany.

CREMATOPTERIS Schimper and Mougeot, 1844.

Crematopteris typica Schimper and Mougeot, 1844, p. 74, pl. 35; Triassic; Soultz-les-Bains, Alsace.

CREPIDOPTERIS Presl, 1838.

Crepidopteris marginata (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 119; alethopterid foliage. See also Brongniart, 1834 (1828-38), pl. 87, fig. 2.

CRETOVARIUM Stopes and Fujii, 1910.

Cretovarium japonicum Stopes and Fujii, 1910, p. 70, pl. 9, figs. 58-60; angiosperm ovary compared with *Alettris* (Liliaceae); Upper Cretaceous; Hokkaido, Japan. See Stopes and Fujii, 1909, p. 559; nom. nud.

CRINANTHUS Massalongo, 1859.

Crinanthus fenzlianum Massalongo, 1859a, p. 61, pl. 36, fig. 1; fruit?, Liliaceae; Eocene; Italy.

CRINITES Tate, 1853.

Crinites lanceolata Tate, in Johnston, 1853, p. 304, pl. 13, fig. 6; leaf? fragment, incertae sedis; Upper Carboniferous; England.

CRINOPHYLLUM Achepohl, 1883.

Crinophyllum sp. Achepohl, 1883, p. 96, pl. 32, fig. 12; calamitean roots?; Upper Carboniferous; Westphalia.

CROMYODENDRON Presl, 1838.

Cromyodendron radnicense Presl, in Sternberg, 1838 (1820-38), p. 193.
For *Scitamineites musaeformis* Sternberg, 1825 (1820-38), Tentamen, p. xxxvi, pl. 5, figs. 2a-b.

CROSSOCHORDA Schimper, 1879.

Crossochorda scotica (MacCoy) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 52, fig. 40; alga, Chordophyceae?; Silurian.

CROSSOTHECA Zeiller, 1883.

Crossotheca crepini Zeiller, 1883, p. 181, pl. 9, figs. 1-9; pteridosperm microsporangiate organ; Carboniferous. For recent detailed consideration of the genus, see Kidston, 1923b, p. 326.

CROSSOTOLEPIS Fliche, 1899.

Crossotolepis perroti Fliche, 1899b, p. 474, pl. 12, fig. 2; seed cone, Coniferales; Oligocene; near Embrun, France.

CROSSOZAMIA Pomel, 1849.

Crossozamia moreana Pomel, 1849, p. 343; cycadophyte leaf; Jurassic; St. Mihiel, France.

CROTONOPHYLLUM Velenovsky, 1889.

Crotonophyllum cretaceum Velenovsky, 1889, p. 20, pl. 5, figs. 4-11; leaf, compared with *Croton* (Euphorbiaceae); Upper Cretaceous; Vyserovic, Bohemia.

CROWELLA Reid and Chandler, 1933.

Crowella globosa (Bowerbank) Reid and Chandler, 1933, p. 216, pl. 7, figs. 6-11; fruit, Lauraceae; London Clay, Eocene; Sheppey, England.

CRUZIANA d'Orbigny, 1842.

Cruziana rugosa (Cordier) d'Orbigny, 1842, p. 30, pl. 1, fig. 1.

CRYPTOCARYOIDES E. W. Berry, 1937.

Cryptocaryoides mariasimensis E. W. Berry, 1937, p. 47, pl. 6, fig. 3; leaf, compared with *Cryptocarya*, *Aniba* (Lauraceae); Paleocene; Cerro Funes, between Chubut and Santa Cruz, Patagonia.

CRYPTOMERIOPSIS Stopes and Fujii, 1910.

Cryptomeriopsis antiqua Stopes and Fujii, 1910, p. 52, pl. 1, fig. 11; pl. 6, figs. 35-41; coniferous shoot, compared with *Cryptomeria* (Taxodiaceae); Upper Cretaceous; Hokkaido, Japan. Earlier citation: Stopes and Fujii, 1909, p. 559, nom. nud.

CRYPTOMERITES Brongniart, 1849.

Cryptomerites ulmanni (Bronn) Brongniart, 1849, p. 123. For *Cupressites ulmanni* Bronn, 1837 (1837-38), p. 42, pl. 8, fig. 5; coniferous seeds.

CRYPTOPHYLLITES R. M. Johnston, 1888.

Cryptophyllites tasmanica R. M. Johnston, 1888, pl. 22, fig. 13; Carboniferous?; Campania, Mt. Wellington, Tasmania.

CRYPTOPLASMIUM Reinsch, 1881.

Cryptoplasmium sp. Reinsch, 1881, p. 36, pl. 8a, figs. 9, 10; Middle Triassic; Rothenburg, Franconia.

CRYPTOTHECIUM Hübener, 1851.

Cryptothecium antediluvianum Hübener, in Weber, 1851, p. 228; moss; Oligocene; Wohlscheid, Rhenish Prussia.

CRYPTOXYLON Kidston, 1897.

Cryptoxylon forjarens Kidston, 1897, p. 361, pls. 8, 9; stem, incertae sedis; Lower Old Red Sandstone, Devonian; Reswallie, near Forfar, Scotland.

CRYPTOZOON Hall, 1884.

Cryptozoon proliferum Hall, 1884, pl. 6, description on unnumbered page opposite pl. 6; alga?; Greenfield, Saratoga County, N. Y.

CTENIDIOPSIS Raciborski, 1894.

Ctenidiopsis grojecensis Raciborski, 1894, p. 204, pl. 19, figs. 4-7.

CTENIDIUM Heer, 1881.

Ctenidium integerrimum Heer, 1881, p. 17, pl. 16, figs. 4-11; cycadophyte frond; Cretaceous; Almargem, Portugal.

CTENIS Lindley and Hutton, 1834.

Ctenis falcata Lindley and Hutton, 1834 (1831-37), p. 63, pl. 103; cycadophyte leaf; Jurassic; Gristhorpe Bay, Yorkshire, England.

CTENOPHYLLUM Schimper, 1870.

Ctenophyllum braunianum (Goeppert) Schimper, 1870 (1870-72), p. 143; cycadophyte foliage; Rhaetic; Bayreuth, Silesia. For *Pterophyllum braunianum* Goeppert, 1844, p. 134. See also Schenk, 1867 (1865-67), p. 164, pl. 38, figs. 1-10.

CTENOPSIS E. W. Berry, 1911.

Ctenopsis latifolia (Fontaine) E. W. Berry, 1911a, p. 349, pl. 55, figs. 1, 2; foliage, Bennettiales; Patuxent formation, Lower Cretaceous; Fredericksburg, Va.

CTENOPTERIS Saprota, 1872.

Ctenopteris cycadea (Brongniart) Saprota, 1872a-73, p. 355, pl. 40, figs. 2-5; pl. 41, figs. 1, 2; cycadophyte leaves; Jurassic; Moselle, France.

CTENOZAMITES Nathorst, 1886.

Ctenozamites cycadea (Brongniart) Nathorst 1886c, p. 122. For illustrations, see Schenk, 1887, p. 5, pl. 3, figs. 11-16; pl. 4, fig. 18; pl. 6, fig. 30; pl. 7, fig. 36.

CUCUBALITES Goeppert, 1838.

Cucubalites goldfussii Goeppert, 1838, p. 570, pl. 42, fig. 3; flower; Miocene; Röttgen, near Bonn, Rhenish Prussia.

CUCUMITES Bowerbank, 1840.

Cucumites variabilis Bowerbank, 1840, p. 91, pl. 13, figs. 1-34; fruit, Cucurbitaceae; London Clay, Eocene; Sheppey, Kent, England.

CUCURBITARIOPSIS Richard Beck, 1882.

Cucurbitariopsis congregata Richard Beck, 1882, p. 752; fungus; Oligocene; Brandis, near Leipzig.

CUCURBITES E. W. Berry, 1929.

Cucurbites compressus E. W. Berry, 1929b, p. 168, pl. 3, figs. 14, 15; seed, Cucurbitaceae; Tertiary; Belen, Peru.

CULGOWERIA Florin, 1936.

Culgoweria mirabilis Florin, 1936b, p. 133, pl. 33, figs. 3-12; pl. 34; pl. 35, figs. 1, 2; petrified ginkgophyte foliage; Franz Joseph Land.

CULMITES Brongniart, 1822.

Culmites nodosus Brongniart, 1822, p. 215, pl. 12, fig. 1; articulate? stem cast; Eocene; near Paris, France.

CUNEATOPTERIS Henry Potonie, 1903.

Cuneatopteris elegans (Brongniart) Henry Potonie, 1903, p. 16. For *Sphenopteris elegans* Brongniart, 1829 (1828a-38), p. 172, pl. 53, figs. 1, 2.

CUNNINGHAMIOSTROBUS Stopes and Fujii, 1910.

Cunninghamiostrobos yabariensis Stopes and Fujii, 1910, p. 52, pl. 5, figs. 27-34; petrified cone, compared with *Cunninghamia* (Taxodiaceae); Upper Cretaceous, Hokkaido, Japan. Earlier citation: Stopes and Fujii, 1909, p. 559, nom. nud.

CUNNINGHAMITES Presl, 1838.

Cunninghamites oxycedrus Presl, in Sternberg, 1838 (1820-38), p. 203, pl. 48, fig. 3; pl. 49, fig. 1; coniferous shoots; Lower Cretaceous; Saxony. See discussion by Seward, 1919, p. 433.

CUPANITES Schimper, 1874.

Cupanites miocenicus (Ettingshausen) Schimper, 1874 (1869-74), p. 170; leaves, Sapindaceae?; near Vienna, Austria. For *Cupanoides miocenicus* Ettingshausen, 1851, p. 22, pl. 5, fig. 1.

CUPANOIDES Bowerbank, 1840.

Cupanoides lobatus Bowerbank, 1840, p. 69, pl. 2, figs. 1, 2; capsule; London Clay, Eocene; Sheppey, Kent, England.

CUPRESSINANTHUS Caspary, 1886.

Cupressinanthus polysaccus Caspary, 1886, p. 6; male cone, Coniferales; Tertiary; Samland, Baltic Prussia. See also Caspary, 1907, p. 122, pl. 21.

CUPRESSINITES Bowerbank, 1840.

Cupressinites globosus Bowerbank, 1840, p. 52, pl. 10, figs. 12-14, 32, 33; cones, resembling *Cupressus* (Cupressaceae); London Clay, Eocene; Sheppey, Kent, England.

CUPRESSINOCAULON.

Probably error for *Cupressinoxylon*, in Tasche, 1854, p. 92.

CUPRESSINOCLADUS Seward, 1919.

Cupressinocladus salicornoides (Unger) Seward, 1919, p. 307, fig. 752; coniferous twigs; Tertiary.

CUPRESSINOSTROBUS Penny, 1947.

Cupressinostrobis delawarensis Penny, 1947, p. 285, figs. 4, 6, 7, 17; seed cones, Coniferales; Magothy formation, Upper Cretaceous; Deep Cut, west of Summit Bridge, Del.

CUPRESSINOXYLON Goeppert, 1850.

Cupressinoxylon subaequale Goeppert, 1850, p. 202, pl. 27, figs. 1-5; coniferous wood; Tertiary. Of the species described by Goeppert, this is the first which is in any way adequately illustrated.

CUPRESSITES Brongniart, 1828.

Cupressites hulmanni Brongniart, 1828b, p. 109. See Bronn, 1837 (1837-38), p. 42, pl. 8, fig. 5; leafy coniferous twig and cone?

CUPRESSOXYLON Kraus, 1870.

Cupressoxylon ucranicum (Goeppert) Kraus, in Schimper, 1870 (1869-74), p. 374; coniferous wood; Cretaceous; Ukraine. For *Cupressinoxylon ucranicum* Goeppert, 1850, p. 201, pl. 26, figs. 1-4.

CUPULICARPUS Velenovsky and Viniklar, 1929.

Cupulicarpus fechtneri Velenovsky and Viniklar, 1929, p. 28, pl. 21, figs. 4, 5; *Castanea*-like "cupule"; Cretaceous; Slivenec, Bohemia.

CUPULINA (Kidston) Paul Bertrand, 1913.

Cupulina filicoides Kidston, in Bertrand, Paul, 1913, p. 135; nom. nud.

CURIONIA Sordelli, 1896.

Curionia triumphilina Sordelli, 1896, p. 31, pl. 7, fig. 3; incertae sedis; Permian; Colombine, Val Trompia, Italy.

CUSSONIPHYLUM Velenovsky, 1889.

Cussoniphyllum partitum Velenovsky, 1889, p. 22, pl. 5, fig. 1; leaves, compared with *Cussonia specata* (Araliaceae); Upper Cretaceous; Bohdankov, Bohemia.

CYATHEITES Goeppert, 1836.

Cyatheetes schlotheimii Goeppert, 1836, p. 320. For *Pecopteris cyathea* Brongniart, 1828a-38, p. 307, pl. 101, figs. 1-4; pecopterid foliage; Carboniferous; St. Étienne, France.

CYATHEOPTERIS Schimper, 1869.

Cyatheetopteris tessellata (Schimper and Mougeot) Schimper, 1869 (1869-74), p. 704; tree fern stem, Cyatheaaceae? For *Caulopteris tessellata* Schimper and Mougeot, 1844, p. 64, pl. 29. See also Posthumus, 1931.

CYATHOCARPUS C. E. Weiss, 1869.

Cyathocarpus arborescens (Schlotheim) C. E. Weiss, 1869, p. 84. For *Filicites arborescens* Schlotheim, 1820, p. 404; see also Schlotheim, 1832, p. 7, pl. 8, fig. 13.

CYATHOCAULIS Ogura, 1927.

Cyathocaulis naktongensis Ogura, 1927, p. 352, pl. 2; pl. 3, figs. 7-12; pls. 4-6; petrified tree fern stem, Cyatheaceae?; Lower Kyong-sang formation, Upper Jurassic; Chhil-Kok Gun, North Kyong-sang Do, Korea.

CYATHODENDRON Arnold, 1945.

Cyathodendron texanum Arnold, 1945, p. 24, pls. 3-6; petrified tree fern, Cyatheaceae; probably from Fayette formation, lower upper Eocene; 10 miles north of Roma, Starr County, Tex.

CYATHOIDES E. W. Berry, 1922.

Cyathoides thyrsopteroides E. W. Berry, 1922d, p. 119, pl. 1, figs. 1-3; fern frond fragments, Cyatheaceae; Tertiary; Chile.

CYATHOPHYCUS Walcott, 1883.

Cyathophycus reticulatus Walcott, 1883, p. 18, pl. 2, fig. 16; Utica slate, Silurian; Trenton, Oneida County, N. Y.

CYATHORACHIS Ogura, 1927.

Cyathorachis fujiiana Ogura, 1927, p. 368, pl. 8; petrified tree fern petioles, Cyatheaceae?; Upper Cretaceous; Yubari and Ikushumbets, Ishikari province, Hokkaido, Japan.

CYATHOTRACUS Watson, 1906.

Cyathotrachus altus Watson, 1906, p. 3, pls. 1-3; Upper Foot mine, Upper Carboniferous; Shore, England.

CYCADANGIUM Ogura, 1932.

Cycadangium compactum Ogura, 1932b, p. 455, pl. 22, figs. 1-4; cycadophyte sporangia on sporophyll; Cretaceous; Hokkaido, Japan.

CYCADEA Capellini and Solms-Laubach, 1892.

Cycadea imolensis Capellini and Solms-Laubach, 1892, p. 42; Lower Cretaceous; Imolene, Italy.

CYCADEACITES Morris, 1841?

Cycadeacites? columnaris (Presl) Morris, 1841, p. 115. For *Cycadites columnaris* Presl, in Sternberg, 1820-38, p. 194, pl. 47, figs. 1-6. [It is difficult to determine whether Morris actually uses the generic designation *Cycadeacites* (which he attributes to Presl). The name appears as a page heading in Sternberg, 1820-38, p. 194, but *Cycadites* is actually employed in the binomials listed. Morris lists as page heading both *Cycadeacites* and *Cycadites*, but his binomials which follow are cited as "*C. columnaris*" etc.]

CYCADELLA Ward, 1900.

Cycadella reedii Ward, 1900b, p. 264, pl. 15; petrified cycadophyte trunk; Jurassic; Freezeout Hills, Carbon County, Wyo.

CYCADEOCARPUS Dawson, 1873.

Cycadeocarpus columbianus Dawson, 1873, p. 69, pl. 1; petrified cycad seed; Lower Cretaceous or Jurassic; Skidegate Channel, Queen Charlotte Islands, British Columbia. Dawson also describes and figures petrified petioles and leaves as "probably belonging to the same species."

CYCADEOIDEA Buckland, 1828.

Cycadeoidea megalophylla Buckland, 1828, p. 397, pls. 47, 48 (1829); petrified cycadeoid trunk; Jurassic; Isle of Portland, England.

CYCADEOMYELON Saporta, 1873-75.

Cycadeomyelon hettangense Saporta, 1873c-75, p. 333, pl. 119, fig. 5; cycadophyte? stem; Jurassic; Hettange near Metz, France.

CYCADEORACHIS Stopes, 1915.

No specific name given; listed as "Pseudogenus," Stopes, 1915, p. 53, fig. 15; cycadophyte rachis; Lower Greensand, Cretaceous; Kentish Rag, Maidstone, England.

CYCADEOSPERMUM Saporta, 1874.

Cycadeospermum hettangense Saporta, 1874 (1873c-75), p. 238, pl. 116, fig. 6; cycad? seed; Jurassic (upper Liás); Hellange, France.

CYCADEOSTROBUS Carruthers, 1867.

Cycadeostrobus ovatus Carruthers, 1867b, p. 6, pl. 57, figs. 1, 2; cycad cone cast; Wealden; Brook Point, Isle of Wight, England.

CYCADINOCARPUS Schimper, 1870.

Cycadinocarpus keuperianus (Schenk) Schimper, 1870 (1869-74), p. 208, pl. 72; cycad seed?; near Würzburg.

CYCADINOCARPUS Renault, 1896.

Cycadinocarpus augustodensis (Brongniart) Renault, 1896a, p. 385, pl. 85, figs. 1-4; silicified seed; Cordes, Dracy-Saint-Loup, France.

CYCADITES Sternberg, 1825.

Cycadites nilsoni Sternberg, 1825 (1820-38), Tentamen, p. xxxii, pl. 47; cycadophyte frond; Cretaceous; Hör, Sweden. According to Seward, 1917, p. 558, the specimens on which Sternberg's genus was based have been shown to be referable to other genera, and, "As employed by Brongniart and other authors *Cycadites* stands for fossil fronds agreeing in habit with the pinnate leaves of recent species of *Cycas* * * * the presence of a single median in the linear pinnae is generally regarded as an essential feature."

CYCADITES Buckland, 1836.

Cycadites megalophyllus Buckland 1836, p. 497, pl. 60; petrified cycadophyte trunk; Isle of Portland, England.

CYADIUM Guillard, 1839.

Cycadium cyprinopholis Guillard, 1839, p. 129, pl. 3, Carboniferous; Mines of Rivede-Gier, France.

CYCADOCARPIDIUM Nathorst, 1886.

Cycadocarpidium erdmanni Nathorst, 1886c, p. 91, pl. 26, figs. 15–20; cycad megasporophyll; Rhaetic; Bjuf, Sweden.

CYADOCAULUM Frentzen, 1932.

Cycadocaulum rhaeticum Frentzen, 1932, p. 86, pl. 2, fig. 3; Rhaetic; Swabia, Nürtingen, Germany.

CYADOCEPHALUS Nathorst, 1902.

Cycadocephalus sewardi Nathorst, 1902b, p. 7, pl. 1, figs. 7–10; cycadophyte cone compression; Rhaetic; Bjuf, Sweden.

CYADOFILIX Kuntze, 1904.

Cycadofilix, Kuntze, in Post and Kuntze, 1904, p. 156.

CYCADOLEPIS Saporta, 1873–75.

Cycadolepis villosa Saporta, 1873c–75, p. 201, pl. 114, fig. 4; cycadophyte bud scale?; Jurassic; Orbagnoux, France.

CYCADOPHYCOS Massalongo, 1859.

Apparently intended as *Cycadophycos pteroides* (Sternberg) Massalongo, in Massalongo and Scarabelli, 1859, p. 91. For *Caulerpites pteroides* Sternberg, 1820–38, p. 21, pl. 24, fig. 5.

CYCADOPHYLLUM Bornemann, 1856.

Cycadophyllum elegans Bornemann, 1856, p. 73, pl. 6, figs. 9–13; Upper Triassic (Keuper); Johannisthales near Mülhausen, Prussia.

CYCADOPITES Wodehouse, 1933.

Cycadopites sp. Wodehouse, 1933, p. 484, figs. 1–3; cyad pollen; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

CYCADOPSIS Debey, 1848.

Cyadopsis aquisgranensis (Goeppert) Debey, 1848, p. 140. For *Pinites aquisgranensis* Goeppert, 1842b, p. 151, pl. 54, figs. 1–17; Upper Cretaceous (Senonian); near Kunraad, Belgium.

CYCAOPTERIS Zigno, 1853.

Cycadopteris ungeri Zigno, 1853, p. 349. Apparently first species illustrated is *Cycadopteris brauniana* Zigno, 1861, p. 580, pls. 4–6; fern? foliage; Middle Jurassic (Oolite); Monte Pernigotti, Italy.

CYCAOPTERIS Schimper, 1869.

Cycadopteris leckenbyi (Bean) Schimper, 1869 (1869–74), p. 487; cycadophyte foliage; Jurassic; Scarborough, England. For *Ctenis leckenbyi* Bean, in Leckenby, 1863, p. 78, pl. 10, fig. 1.

CYCADORACHIS Saporta, 1873.

Cycadorachis armata Saporta, 1873a, p. 121. See also Saporta, 1874 (1873c–75), p. 196, pl. 117, fig. 1; fragment of cycadophyte rachis; Jurassic; Armaille, near Belley, France.

CYCADOSPADIUM Schimper, 1870.

Cycadospadium henmocquei (Pomel) Schimper, 1870 (1869–74), p. 207, pl. 72; *Cycas*-like megasporophyll; Lower Jurassic (Lias); Moselle, France.

CYCADOXYLON Renault, 1879.

Cycadoxylon fremyi Renault, 1879, p. 283, pl. 14, figs. 9–16; cycadlike wood; Permian; France.

CYCLANTHODENDRON Sahni and Surange, 1944.

Cyclanthodendron sahnii (Rode) Sahni and Surange, 1944, p. 84, figs. 3–8; petrified stem, Cyclanthaceae; Deccan Intertrappean series, Eocene; Mohgaon Kalan, India.

CYCLOCARPON Goeppert and Fiedler, 1857.

Cyclocarpon nummularium Goeppert and Fiedler, in Fiedler, 1857, p. 292, pl. 28, fig. 47; seed?; Carboniferous; Saarbrücken.

CYCLOCARPUS C. F. W. Braun, 1840.

Cyclocarpus radiatus C. F. W. Braun, 1840, p. 96; nom. nud.

CYCLOCLADIA Lindley and Hutton, 1834.

Cyclocladia major Lindley and Hutton, 1834 (1831–37), p. 137, pl. 130; lycopod stem impression?; Bensham coal seam, Upper Carboniferous; Jarrow Colliery, England.

CYCLODENDRON Kräusel, 1928.

Cyclodendron leslii (Seward) Kräusel, in Kräusel and Range, 1928, p. 21, pl. 1, figs. 3–10; lycopod stem compression; Karroo beds, Permian; German Southwest Africa.

CYCLOIS Stenzel, 1872.

Cyclois varians (Corda) Stenzel, 1872, p. 72. For *Palmacites varians* Corda, 1846, p. 87, pl. 47, figs. 7–9; Upper Cretaceous (Cenomanian); Kutschlin near Bilin, Bohemia.

CYCLOITES Gruss, 1928.

Palaeobiologica, 1928, Band 1, p. 516; alga?; Devonian (not seen). See also Gothan, 1942b, p. 117.

CYCLOPITYS Schmalhausen, 1879.

Cyclopitys nordenskiöldi (Heer) Schmalhausen, 1879, p. 41, pl. 1, fig. 4b; pl. 2, fig. 1c; pl. 5, figs. 2d, 3b, 6b, 10; articulate foliage; Permian; Russia.

CYCLOPTERIS Brongniart, 1830.

Cyclopteris reniformis Brongniart, 1830 (1828a–38), p. 216, pl. 61, fig. 1; fern-like pinnule; Carboniferous.

- CYCLOSPERMUM** Seward, 1917.
CyclospERMUM tenuis (Brongniart) Seward, 1917, p. 341. For *Cyclocarpus nummularis* Brongniart, 1881, pl. 4.
- CYCLOSTIGMA** Houghton, 1860.
Cyclostigma kiltorkense Houghton, 1860, p. 222; for illustration, see Houghton, 1859, pl. 40, fig. 1; decorticated lycopod stem; Upper Devonian; Kiltorcan, County Kilkenny, Ireland. See also Seward, 1910, p. 251.
- CYCLOTHECA** Kidston, 1888.
CyclotheCA biseriata Kidston, 1888, p. 515, pl. 21, figs. 10-12; sporangia, Marattia-ceae; shales above "Killorgue" coal, Upper Carboniferous; Ellismuir, Baillieston, Lanarkshire, Scotland.
- CYCLOZAMIA** Pomel, 1849.
Cyclozamia insignis Pomel, 1849, p. 345; cycadophyte leaf; Jurassic; Seyssel, France. The use of this binomial is vague; the description is headed "*Zamites insignis* ou *Cyclozamia insignis* Pom."
- CYLINDRITES** Goeppert, 1841.
Cylindrites spongiosus Goeppert, 1841a, p. 115, pl. 46, figs. 1-5; Cretaceous; near Bunzlau, Silesia.
- CYLINDROPLASMIUM** Reinsch, 1881.
Cylindroplasmium sp. Reinsch, 1881, p. 44, pl. 10b, fig. 1; pl. 10c, fig. 3; Silurian; Illinois.
- CYLINDROPODIUM** Saporta, 1873-75.
Cylindropodium lasinum Saporta, 1873c-75, p. 268, pl. 118, fig. 3; pl. 119, figs. 1, 2; pl. 124, figs. 3, 4; cycadophyte trunk; Jurassic; near Lunéville, France.
- CYMODOCEITES** Bureau, 1886.
Cymodoceites parisiensis (Brongniart) Bureau, 1886, p. 192. See Squinabol, 1900, p. 44, pl. 5, fig. 2; Naiadaceae; Eocene; Arthon, France.
- CYMOGLOSSA** Schimper, 1869.
Cymoglossa goepperti (Morris) Schimper, 1869 (1869-74), p. 553; pectopteridlike foliage; Orenbourg, Russia. For *Pecopteris goepperti* (Morris) Brongniart, 1845, pl. A, figs. 2a-c; pl. F, figs. 1a-c, 1e.
- CYNAROCEPHALUS** Kerner, 1916.
Cynarocephalus schuberti Kerner, 1916, p. 190; Tertiary; Cetina Valley, Italy.
- CYNOMETROXYLON** Chowdhury and Ghosh, 1946.
Cynometroxylon indicum Chowdhury and Ghosh, 1946, p. 435, pls. 10, 11; wood, compared with *Cynometra* (Caesalpinoideae); Upper Miocene; Naialung, Assam, India. Preliminary note in Chowdhury and Ghosh, 1939.
- CYPARISSIDIUM** Heer, 1874.
Cyparissidium gracile Heer, 1874a, p. 74, pl. 17, figs. 5b, 5c; pls. 19, 20, 21; cones and foliage-bearing shoots, Taxodiaceae; Cretaceous; Kome, Greenland.
- CYPERACITES** Schimper, 1870.
Cyperacites dubius (Heer) Schimper, 1870 (1869-74), p. 413. For *Cyperites dubius* Heer, 1855, p. 75, pl. 27, fig. 8; Cyperaceae; Tertiary; Oeningen, Switzerland.
- CYPERITES** Lindley and Hutton, 1832.
Cyperites bicarinata Lindley and Hutton, 1832 (1831-37), p. 123, pl. 43; lycopod leaf; Carboniferous; Leebotwood Coal Pit, England.
- CYPEROCARPUS** Pax, 1906.
Cyperocarpus uncinatus Pax, 1906, p. 279, pl. 4, figs. 10, 11; fruit, Cyperaceae.
- CYPEROCAULON** Lingelsheim, 1917.
Cyperocaulon parianum Lingelsheim, 1917, p. 545, figs. 1-3; Tertiary; Monte Szentgyorgy near Tapelca, Hungary.
- CYPHOPTERIS** Presl, 1838.
Cyphopteris punctulata (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 121; alethopterid foliage. See also Brongniart, 1828-38, pl. 93, figs. 1, 2.
- CYPSSELITES** Heer, 1859.
Cypselites naegeli Heer, 1859, p. 2, pl. 101, fig. 1; fruit, Compositae; Tertiary; Oeningen, Switzerland.
- CYRRHITES** Heer, 1859.
Cyrrhites oeningensis Heer, 1859, p. 136, pl. 140, fig. 55; incertae sedis; Tertiary; Oeningen, Switzerland.
- CYSTIPHYCUS** Herzer, 1901.
Cystiphyucus latifrons Herzer, 1901, p. 23, fig. 1; "fucoid"; Carboniferous; Marietta, Ohio.
- CYSTORRHIZA** Massalongo, 1859.
Cystorrhiza pillularioides Massalongo, 1859, p. 20; Marsileaceae; Eocene; Monte Bolca, Italy; nom. nud.
- CYTOSEIRITES** Sternberg, 1833.
Cystoseirites partschii Sternberg, 1833 (1820-38), p. 35, pl. 11, fig. 1; alga, some resemblance to *Sargassum*?; Miocene; Szakadat, Transylvania.
- CYTOSEIRITES** C. F. W. Braun, 1840.
Cystoseirites lancifolius C. F. W. Braun, 1840, p. 93; nom. nud.
- CYSTOSPORITES** Schopf, 1938.
Cystosporites bretonensis Schopf, 1938a, p. 40, pl. 1, figs. 10, 11; pl. 3, fig. 5; pl. 8, figs. 1-4; spore; Carboniferous formation, Pennsylvanian; Illinois.
- CZEKANOWSKIA** Heer, 1876.
Czekanowskia setacea Heer, 1876c, p. 68, pl. 5, figs. 1-7; pl. 6, figs. 1-6; pl. 10, fig. 11; pl. 12, fig. 5b; pl. 13, fig. 10c; fascicles of filiform leaves, Ginkgoophyte; Jurassic.

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- DACRYDITES** Marik, 1901.
Dacrydites incertus Marik, 1901, p. 10, pl. 1, fig. 20; Cretaceous (Cenomanian); Slivenec, Bohemia.

DACTYLODISCUS Renault, 1899.

Dactylodiscus triangularis Renault, 1899, p. 977, pl. 17, fig. 12; Tertiary; Asson, France.

DACTYLOIDITES Hall, 1886.

Dactyloidites bulbosus Hall, 1886, p. 160, pl. 11; marine alga?; Paleozoic; Middle Granville, Washington County, N. Y.

DACTYLOPHYCUS Miller and Dyer, 1878.

Dactylophycus tridigitatus Miller and Dyer, 1878, p. 1, pl. 3, fig. 2; incertae sedis; Cincinnati group, Silurian; Cincinnati, Ohio.

DACTYLOPHYLLUM Read, 1934.

Dactylophyllum johnsoni Read, 1934, p. 91, pl. 18, figs. 2, 3; leaf of *Baiera* type; Weber (?) formation; lower Pennsylvanian; Bed 17 of Evans Peak section, Mosquito Range, Colo.

DACTYLOPORA Lamarck, 1838.

Dactylopora cylindracea Lamarck, in Bronn, 1838, p. 885, pl. 35, figs. 27a, 27b; alga, Dasycladaceae; Lower Eocene; Versailles, France.

DACTYLOPORELLA Guembel, 1871.

Dactyloporella cylindracea (DeFrance) Guembel, 1871, p. 263, pl. D, figs. 9a, 9b.

DACTYLOPORUS Herzer, 1893.

Dactyloporus archaicus Herzer, 1893b, p. 289, pl. 13; fungus, Polyporaceae?; Carboniferous; Tuscarawas County, Ohio.

DACTYLOPTERIS Goeppert, 1852.

Dactylopteris stiehleriana Goeppert, 1852b, p. 166, pl. 13, fig. 6; fernlike? foliage.

DACTYLOTHECA Zeiller, 1883.

Dactylothea dentata (Brongniart) Zeiller, 1883, p. 184, pl. 9, figs. 12-15; fertile fern frond; Carboniferous. For recent discussion, see Radforth, 1938, 1939.

DACTYOLEPIS Hollick and Jeffrey, 1909.

Dactyolepis cryptomerioides Hollick and Jeffrey, 1909, p. 52, pl. 10, figs. 12, 13; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

DADOXYLON Endlicher, 1847.

Dadoxylon withami (Lindley and Hutton) Endlicher, 1847, p. 298. For *Pinites withami* Lindley and Hutton, 1831-37, p. 9, pl. 2; Upper Carboniferous; Craigleith, Scotland. See also Frentzen, 1931.

DAEDALEITES Meschinelli, 1892.

Daedaleites quercinus (Massalongo) Meschinelli, in Saccardo, 1892, p. 747; fungus in oak wood; Quarternary; Italy. See also Meschinelli, 1898, p. 6.

DAEDALUS Roualt, 1850.

Daedalus newtoni Roualt, 1850, p. 737; Silurian; Brittany.

DAIMONELIX Barbour, 1892.

Daimonelix circumaxillis Barbour, 1892, p. 314, pls. 1, 3; fig. 10; a problematical fossil considered by some authors to be of plant origin; Miocene; near Harrison, Sioux County, Nebr. For recent review, see Schultz, 1942.

DALBERGIOPHYLLUM Ettingshausen, 1886.

Dalbergiophyllum affine Ettingshausen, 1886, p. 134, pl. 151, figs. 21, 22; leaf, Papilionaceae; Eocene; Vegetable Creek, New South Wales.

DALBERGITES Kuntze, 1904.

Dalbergites Kuntze, in Post and Kuntze, 1904, p. 162.

DALBERGITES E. W. Berry, 1916.

Dalbergites ellipticifolius E. W. Berry, 1916b, p. 247, pl. 54, fig. 10; leaf, Papilionaceae; Grenada formation, lower Eocene; Grenada, Grenada County, Miss.

DALIOSTROBUS.

Daliostrobos sternbergii; probably error for *Doliostrobos*, in Henry Potonie, 1893b, p. 223.

DALYIA Walcott, 1919.

Dalyia racemata Walcott, 1919, p. 237, pl. 55, fig. 4; pl. 56, fig. 1; alga, Rhodamelaceae; Stephen formation, Middle Cambrian; Burgess Pass fossil quarry, above Field, British Columbia.

DAMMARITES Presl, 1838.

Dammarites albens Presl, in Sternberg, 1838 (1820-38), p. 203, pl. 52, figs. 11, 12; cone, Coniferales; Cretaceous (Cenomanian); Neubidschow, Bohemia.

DAMMAROPHYLLUM Velenovsky, 1889.

Dammarophyllum striatum Velenovsky, 1889, p. 7. For *Podozamites striatus* Velenovsky, 1885, p. 10, pl. 2, fig. 8; Upper Cretaceous; Liebenau, Bohemia.

DANAEIDES Schimper, 1869.

Danaeides asplenoides (Goeppert) Schimper, 1869 (1869-74), p. 616. For *Danaeites asplenoides* Goeppert, 1836, p. 380, pl. 19, figs. 4, 5; fertile fernlike foliage; Carboniferous; Charlottenbrunn, Silesia.

DANAEITES Goeppert, 1836.

Danaeites asplenoides Goeppert, 1836, p. 380, pl. 19, figs. 4, 5; fertile fernlike foliage; Carboniferous; Charlottenbrunn, Silesia.

DANAEOPSIS Heer, 1864.

Danaeopsis marantacea Heer, in Schenk, 1864a, p. 303, pl. 48, fig. 1.

DAPHNITES Ettingshausen, 1867.

Daphnites goepperti Ettingshausen, 1867, p. 253, pl. 2, fig. 8; leaf, Daphnoideae?; Cretaceous; Aigen, Austria.

DAPHNOGENE Unger, 1845.

Daphnogene cinnamomeifolia (Brongniart) Unger, 1845, p. 227. For *Phyllites cinnamomeifolia* Brongniart, 1828b, p. 209. See also Unger, 1851, p. 168, pl. 39, figs. 7-9; leaf, dicotyledon; Miocene; Rado-boj, Croatia.

DAPHNOPHYLLUM Heer, 1869.

Daphnophyllum fraasii Heer, 1869c, p. 17, pl. 6, figs. 1, 2; Cretaceous (Cenoma-nian); Moletain, Moravia.

DASYCLADITES Fucini, 1936.

Reference not seen. See Gothan, 1942b, p. 117.

DASYPHYLLUM Nathorst, 1886.

Dasyphyllum rigidum Nathorst, 1886c, p. 112, pl. 26, figs. 1-5; incertae sedis; Rhaetic; Bjuf, Sweden. See also *Dasyphyllum rigidum* Nathorst, 1878, p. 12; nom. nud.

DASYPORELLA Stolley, 1893.

Dasyoporella silurica Stolley, 1893, p. 139, pl. 8, figs. 1-6; siphonaceous alga; Silurian.

DAUBREEIA Zeiller, 1888.

Daubreeia pateraeformis (Germar) Zeiller, in Renault and Zeiller, 1888, p. 10, pl. 41, fig. 1; cyclopterid leaflet; Carbonif-erous; Commentry, France.

DAVALLITES Dawson, 1883.

Davallites richardsoni Dawson, 1883, p. 25, pl. 5, figs. 18, 18a, 18b; fertile fern foliage; Upper Cretaceous; Protection Island, British Columbia. This species appears to be the first described. Earli-est reference is *Davallites delicatulus* Braun, 1840, p. 96; this species and five others nom. nud.

DAVIDOIDEA Thomas Johnson, 1937.

Davidoidea hebridica Thomas Johnson, 1937, p. 330, pl. 21, fig. 3; leaf, Nys-saceae; Tertiary; Scotland.

DAISELLA Reid and Chandler, 1933.

Davisella ehretioides Reid and Chandler, 1933, p. 483, pl. 28, figs. 6-9; Boragina-ceae; London Clay, Eocene; Harefield, Middlesex, England.

DAWSONITES Halle, 1916.

Dawsonites arcuatus Halle, 1916, p. 24, pl. 3, figs. 1-9; pl. 4, figs. 18-21; psilo-phyte; Lower Devonian; Røragen, Nor-way.

DEBEYA Miquel, 1853.

Debeya serrata Miquel, 1853, p. 38, pl. 1, fig. 1; leaf, Artocarpeae? (Moraceae); Upper Cretaceous (Senonian); near Kunraad, Belgium.

DECAGONOCARPUS Renault, 1890.

Decagonocarpus olivaeformis Renault, in Renault and Zeiller, 1890, p. 651, pl. 72, fig. 56; seed; Carboniferous; Commen-try, France.

DECAPLATYSPERMUM Reid and Chandler, 1933.

Decaplatyspermum bowerbanki Reid and Chandler, 1933, p. 256, pl. 9, figs. 23-29; fruit, Linaceae?; London Clay, Eo-cene; Sheppey, Kent, England.

DECHENIA Goepfert, 1842.

Dechenia euphorbioides Goepfert, 1842 (1841-46), p. 77, pl. 3, fig. 1; incertae sedis; Devonian; Landshut, Silesia.

DELESSERITES Sternberg, 1833.

Delesserites lamourouxii (Brongniart) Sternberg, 1833 (1820-38), p. 32. For *Fucoides lamourouxii* Brongniart, 1828a-38, p. 64, pl. 8, fig. 2.

DELESSERITES Ruedemann, 1925.

Delesserites salicifolia Ruedemann, 1925, p. 8, pl. 1, fig. 2; alga?; Utica shale, Ordovician; New York.

DELGADOA Heer, 1881.

Delgadoa occidentalis Heer, 1881, p. 6, pl. 6, figs. 4-8; pl. 7; fern?, compared with *Jamesonia imbricata* Hooker; Jurassic; San Pedro near Cintra, Portu-gal.

DELGADOPSIS Saporta, 1894.

Delgadopsis rhizostigma Saporta, 1894, p. 141, pls. 23, 25, 26; leaf, incertae sedis; Cretaceous; Portugal.

DELTOIDOSPORA Miner, 1935.

Deltoidospora hallii Miner, 1935, p. 618, pl. 24, figs. 7, 8; spore, Gleicheniaceae?; Kootenai formation, Lower Cretaceous; Cascade County, Mont.

DELTOLEPIS Harris, 1942.

Deltolepis credipota Harris, 1942a, p. 573, figs. 3, 4; bud scale, referred to *Andro-lepis* and *Beania*; Middle Estuarine, Jurassic; Cayton Bay, Yorkshire, Eng-land.

DEMETRIA Zalessky, 1930.

Demetria amadoca Zalessky, 1930d, p. 231, pl. 1, fig. 8; lycopod stem similar to *Lepidodendron*; Lower Carboniferous; Staro-Beshev, Donets, Russia.

DENDRACTIS Reis, 1923.

Dendractis brevis Reis, 1923, p. 111, pl. 3, figs. 2-4?, 5, 6; pl. 4, figs. 5, 6; Tertiary; Rhenish Bavaria.

DENDRAENA Němejč, 1934.

Dendraena pinnatilobata Němejč, 1934, p. 3, figs. 1, 2; figs. 7-12 [unnumbered plate]; sphenopterid foliage-bearing sporangia; Carboniferous; Central Bo-hemia.

DENDROPHYCUS Lesquereux, 1884.

Dendrophycus desorii Lesquereux, 1884, p. 699, pl. 88, fig. 1; marine alga; No. 11 Mauch Chunk shale, Pennsylvanian; bluffs of the Susquehanna above Pitts-ton, Pa.

DENDROPLASMIUM Reinsch, 1881.

Dendroplasmium sp. Reinsch, 1881, p. 30, pl. 3, figs. 1-5; Upper Carboniferous; Zwickau, Saxony.

DENDROPTERIDIUM Bancroft, 1932.

Dendropteridium cyatheoides Bancroft, 1932a, p. 251, pls. 9, 10; petrified stem, Cyatheaceae; late Tertiary; near Butandiga, Mount Elgon, British East Africa.

DENSOSPORITES Willard Berry, 1937.

Densosporites covensis Willard Berry, 1937, p. 157, fig. 11; spore; Pennington coal, Mississippi; Cranmore Cove, Rhea County, Tenn.

DEPAZITES Meschinelli, 1892.

Depazites acericola (Saporta) Meschinelli, in Saccardo, 1892, p. 785. See also Meschinelli, 1898, p. 71, pl. 20, fig. 3; fungus, Sphaeropsidae.

DERBYELLA David White, 1908.

Derbyella aurita David White, 1908, p. 545, pl. 9, figs. 1, 1a, 2, 2a, 3; reproductive organs of *Gangamopteris obovata*?; "Permo-Carboniferous"; northeast of Minas, Brazil. Earlier citation: *Derbyella aurita* I. C. White, 1906, p. 379; nom. nud.

DERMATOPHYLLITES Goeppert and Berendt, 1845.

Dermatophyllites stilligerus Goeppert and Berendt, 1845, p. 76, pl. 5, figs. 48-50; leaf, Ericaceae; Miocene; Prussia.

DESMIA Eichwald, 1860.

Desmia fistulosa Eichwald, 1860, p. 101, pl. 18, figs. 8, 9; petrified stem, incertae sedis; Permian; Kargala, Orenbourg, Russia. Earlier reference: *Desmia fistulosa* Eichwald, in Mercklin, 1856, p. 82; nom. nud. See also Posthumus, 1931.

DESMIOPHYLLUM Lesquereux, 1878.

Desmiophyllum gracile Lesquereux, 1878b, p. 333; Pennsylvanian; Cannelton, Beaver County, Pa. See also Lesquereux, 1879, pl. 82, fig. 1.

DESMODITES Unger, 1839.

Desmodites radobojsensis Unger, 1839a, p. 104; Miocene; Radoboj, Croatia.

DESMODOPHYLLUM Unger, 1850.

Desmodophyllum viticinoides Unger, 1850a, p. 487; leaf, Leguminosae; Miocene; Radoboj, Croatia.

DESMOPHLEBIS Brongniart, 1849.

Desmophlebis flexuosa (Goeppert) Brongniart, 1849, p. 152; apparently for *Alethopteris flexuosa* in Goeppert, 1836, p. 308, although Goeppert attributes the species to Sternberg (1820-38), who figures *Pecopteris flexuosa* (Goeppert) on pl. 33, fig. 1; fernlike foliage; Triassic (Keuper); Reindorf near Bamberg, Bavaria.

DESMOPTERIS Stur, 1883.

Desmopteris alethopteroides (Ettingshausen) Stur, 1883, p. 701. For *Asplenites alethopteroides* Ettingshausen, 1854, p. 41, pl. 19, fig. 5; Carboniferous; Swina near Radnitz, Bohemia.

DEWALQUEA Saporta and Marion, 1873.

Dewalquea haldemiana (Debey) Saporta and Marion, 1873, p. 60, pl. 7, fig. 1; Tertiary?; Haldem, Westphalia.

DIACHAENITES Alexander Braun, 1859.

Diachaeites heeri Alexander Braun, in Heer, 1859, p. 25, pl. 104, fig. 22; fruit, Umbelliferae?; Tertiary; Oeningen, Switzerland. Earlier reference: Stizenberger, 1851, p. 89; nom. nud.

DICALAMOPHYLLUM Sterzel, 1880.

Dicalamophyllum altendorfsense Sterzel, 1880, p. 13, pl. 2, figs. 17-21, 25, 26; Permian; Altendorf near Chemnitz, Germany.

DICERAS Velenovsky, 1889.

Diceras cenomanicus Velenovsky, 1889, p. 14, pl. 2, figs. 5-7; shoots and cones, Taxodiaceae; Cretaceous (Cenomanian); Vyserovic, Bohemia.

DICERATOSPERMA H. N. Andrews, 1941.

Diceratosperma carpenteriana H. N. Andrews, 1941, p. 379, pl. 15, figs. 8-10; platyspermic seed associated with *Dichophyllum moorei*; Victory Junction member of Stanton limestone, Missouri group; Pennsylvanian; 6 miles northwest of Garnett, Kans.

DICHONEURON Saporta and Marion, 1885.

Dichoneuron hookeri Saporta and Marion, 1885, p. 231, fig. 100a. Earlier reference: *Dichoneuron hookeri* Saporta, 1878, p. 872; nom. nud.

DICHOPHLEBIS.

Error for *Dicrophlebis*, in Bigsby, 1878, p. 375.

DICHOPTERIS Zigno, 1864.

Dichopteris visianica Zigno, 1864, p. 218, pl. 11, figs. 1-3; pl. 12, fig. 1; fern frond, dichotomously branching rachis; Jurassic (Oolite); Val d'Assa, Vicetina, Italy.

DICHOTOZAMITES E. W. Berry, 1911.

Dichotozamites cycadopsis (Fontaine) E. W. Berry, 1911a, p. 365, pl. 77, figs. 2, 3; cycad? foliage; Patapsco formation, Lower Cretaceous; Mt. Vernon near Brooke, Va.

DICKSONIOPSIS E. W. Berry, 1911.

Dicksoniopsis vernonensis (Ward) E. W. Berry, 1911a, p. 237, pl. 27, figs. 3, 4; frond, Cyatheaceae; Arundel formation, Lower Cretaceous; Arlington, Md.

DICKSONIOPTERIS Nathorst, 1890.

Dicksoniopteris naumanni Nathorst, 1890, p. 51, pl. 5, fig. 4; sterile fern foliage; Mesozoic; Yakimura, Haginodani, Japan.

- DICKSONITES** Sterzel, 1881.
Dicksonites pluckeneti (Schlotheim) Sterzel, 1881, p. 226; Permian; Lungau, Saxony. *See also* Sterzel, 1883, p. 282, 318, pl. 6, figs. 1-6.
- DICLIDOCARYA** E. Reid, 1920.
Diclidocarya gibbosa E. Reid, 1920, p. 82, pl. 4, figs. 23-25; seed, family uncertain; Pliocene; Pont-de-Gail, France.
- DICOTYLOPHYLLUM** Saporta, 1894.
Dicotylophyllum cerciforme Saporta, 1894, p. 147, pl. 26, fig. 14; leaf, dicotyledon; Cretaceous; Portugal.
- DICOTYLOPHYLLUM** Bandulska, 1923.
Dicotylophyllum stopesii Bandulska, 1923, p. 244, 433, pl. 20, figs. 1-4; leaf, dicotyledon; Eocene; Bournemouth, England.
- DICRANITES** Klebs, 1907.
Dicranites casparyi Klebs, in Caspary, 1907, p. 52, pl. 7, figs. 42-45; Tertiary; Baltic Prussia.
- DICRANOPHYLLUM** Grand'Eury, 1877.
Dicranophyllum gallicum Grand'Eury, 1877, p. 275, pl. 14, figs. 8-10; shoot bearing filiform dichotomizing leaves; Carboniferous; St.-Étienne, France.
- DICRANOPHYTON** Zalessky, 1937.
Dicranophyton paleophytographica, p. 10: Moskva, Akad. Nauk SSSR, 1937 (not seen). *See* Gothan, 1942b, p. 118.
- DICRANOPTERIS** Zalessky, 1937.
Dicranopteris regia Zalessky, 1937b, p. 48, figs. 13-15; sphenopterid foliage; Permian; Matveyevo, Russia.
- DICROIDIOPSIS** Frenguelli, 1943.
Dicroidiopsis incisa (Du Toit) Frenguelli, 1943a, p. 288, fig. 22; pteridosperm? foliage; Molteno beds, upper Keuper, Triassic; Konings Kroon, Cape Colony.
- DICROIDIDIUM** Gothan, 1912.
Dicroididium odontopteroides (Morris) Gothan, 1912, p. 78, pl. 16, fig. 5; pteridosperm? foliage; Rhaetic; South Africa.
- DICROPHLEBIS** (Brongniart) Meneghini, 1857.
Dicrophlebis affinis (Schlotheim) Meneghini, 1857, p. 108, pl. D, fig. V4. *See also* Brongniart, 1849, p. 74.
- DICROPTERIS** Pomel, 1849.
Dicropteris laciniata Pomel, 1849, p. 339; fern; Jurassic; St. Mihiel, France.
- DICTIOPHRAGMIUM** Reinsch, 1881.
Dictiophragmium sp. Reinsch, 1881, p. 99, pl. 34, fig. 1; pl. 35, figs. 1, 2; Upper Carboniferous; Newcastle, England.
- DICTUOLITES** Conrad, 1838.
Dictuolites beckii Conrad, 1838, p. 113; Silurian; New York. *See also* Conrad, in Hall, 1843, p. 48, pl. 1, fig. 1.
- DICTYOCALAMITES** E. A. N. Arber, 1912.
Dictyocalamites burri E. A. N. Arber, 1912, p. 97, pl. 5, figs. 1, 3, 5; calamitean stem impression; Upper Carboniferous; Barfreston, Kent coalfield, England.
- DICTYOCALLIPTERIDIUM** Jongmans and Gothan, 1935.
Dictyocallipteridium sundaicum Jongmans and Gothan, 1935, p. 137, pl. 44, figs. 3, 4; fern foliage; Upper Carboniferous; Residentie Djambi, Mengkarang, Sumatra.
- DICTYOCORDAITES** Dawson, 1889.
Dictyocordaites lacoi Dawson, 1889, p. 3, fig. [unnumbered]; cordaites stem and leaf compression; Upper Devonian; Meshoppen, Wyoming County, Pa.
- DICTYODENDRON** Landsborough, 1844.
Dictyodendron patricii Landsborough, in Patrick, 1844, p. 287, pl. 5, fig. 1; stem cast?; Carboniferous; Ardeer, Ayrshire, England.
- DICTYODENDRON** Eichwald, 1860.
Dictyodendron leuchtenbergii Eichwald, 1860, p. 247, pl. 19, figs. 5, 6; pl. 20, figs. 9-11; coniferous wood; Carboniferous; Artinsk, Russia.
- DICTYODENDRON** Nathorst, 1914.
Dictyodendron kidstonii Nathorst, 1914, p. 72, pl. 8, figs. 1-4; pl. 9, figs. 1-8; pl. 12, figs. 11-20; pl. 13, figs. 32-36; stem cast; Paleozoic; Spitzbergen.
- DICTYODORA** C. E. Weiss, 1884.
Dictyodora liebeana (Geinitz) C. E. Weiss, 1884a, p. 84, pl. 11; pl. 12, figs. 1-5; plant?; Lower Carboniferous (Culm); Thuringia.
- DICTYOPHLOIS** Foerste, 1916.
Dictyophlois reticulata Foerste, 1916, p. 675, pl. 33; rhizophore compared with *Stigmaria*; Carboniferous; Sample, Breckenridge County, Ky.
- DICTYOPHYCUS** Ruedemann, 1931.
Dictyophycus gracilis Ruedemann, 1931, p. 1, pls. 1, 2; alga?; Burgess shale, Middle Cambrian; Burgess Pass, near Field, British Columbia.
- DICTYOPHYLLUM** Lindley and Hutton, 1834.
Dictyophyllum rugosum Lindley and Hutton, 1834 (1831-37), p. 65, pl. 104; fern leaf, Dipterinae; Jurassic (Oolite); Yorkshire, England.
- "DICTYOPHYLLUM"** Sze, 1933.
"Dictyophyllum" Sze, 1933, p. 14, pl. 4, figs. 12, 13; leaf fragment, incertae sedis; Paleozoic; Kuangyuen, China. Cited doubtfully as a new genus.
- DICTYOPHYTON** Hall, 1863.
Dictyophyton newberryi Hall, 1863, p. 76, pl. 4, figs. 1-3; Chemung group, Devonian; Cuyahoga Falls, Richfield, Ohio.

DICTYOPLASMIUM Reinsch, 1881.

Dictyoplasmium sp. Reinsch, 1881, p. 41, pl. 10b, figs. 7, 8; pl. 15, fig. 3; Upper Carboniferous; Zwickau, Saxony.

DICTYOPORUS Mägdefrau, 1937.

Dictyoporus nodusus Mägdefrau, 1937, p. 55, pl. 4, fig. 10; plant?; Cretaceous (Upper Senonian); Misburg near Hannover.

DICTYOPTERIDIUM Ottokar Feistmantel, 1880.

Dictyopteridium sporiferum Ottokar Feistmantel, 1880 (1880–81), p. 14, pl. 23A, figs. 4–6, 14; Permian; Talchir and Gopalprasad, India.

DICTYOPTERIS Gutbier, 1835.

Dictyopteris brongniarti Gutbier, 1835, p. 63, pl. 11, figs. 7, 9, 10; Upper Carboniferous; Zwickau, Saxony.

DICTYOSPORITES Felix, 1894.

Dictyosporites loculatus Felix, 1894a, p. 277, pl. 19, fig. 2; fungus conidia, compared with *Septosporidium*; Eocene; Perekeschul, near Baku, Transcaucasia. Meschinelli, 1898, p. 79, erroneously attributes this genus to Corda.

DICTYOTESTA Gothan, 1941.

Dictyotesta lonchopteroides Gothan, 1941, p. 279, figs. a, b; described as seed of *Lonchopteris rugosa*; Carboniferous; Aachen, Rhenish Prussia.

DICTYOTHALAMUS Goeppert, 1864.

Dictyothalamus schrollianus Goeppert, 1864, p. 164, pl. 24, figs. 4–6; pl. 25, figs. 1–4; microsporangiate inflorescence?; Permian.

DICTYOTITES (Brongniart) Massalongo, 1859.

Dictyotites brongniartii Massalongo, 1859, p. 51, pl. 14, fig. 1; alga?; Italy.

DICTYOXYLON Williamson, 1869.

Dictyoxyton oldhamii (Binney) Williamson, 1869a, p. 66, pl. 20, figs. 3, 4; pteridosperm stem, see *Lyginopteris*; Carboniferous; England. See also Seward, 1917, p. 38.

DICTYOXYLON Brongniart, 1872.

Dictyoxyton sp. Brongniart, in Renault, 1872, p. 1295; silicified sigillarian? trunk; Upper Carboniferous; Autun, France.

DICTYOZAMITES (Oldham) Medlicott and Blanford, 1879.

Dictyozamites falcatus (Morris) Medlicott and Blanford, 1879, p. 142, pl. 8, fig. 6. For *Dictyopteris falcata* Morris, in Oldham and Morris, 1863, p. 38, pl. 24, figs. 1, 1a.

DIDYMOPHYLLON Goeppert, 1841.

Didymophyllum schottini Goeppert, 1841a (1841–46), p. 69; decorticated lycopod stem?; Devonian; Landshut, Silesia.

DIDYMOSORUS Debey and Ettingshausen, 1859.

Didymosorus comptoniifolius Debey and Ettingshausen, 1859b, p. 186, pl. 1, figs. 1–5; foliage, Gleicheniaceae; Upper Cretaceous; Aachen, Rhenish Prussia. Earlier citation: *Didymosorus comptoniifolius* Debey, 1849, p. 299; nom. nud.

DIDYMOTHECA Goeppert, 1864.

Didymotheca cordata Goeppert, 1864, p. 178, pl. 26, fig. 24; pl. 28, figs. 12, 13; seed?; Permian; Braunau, Bohemia.

DIEMENIA Ettingshausen, 1887.

Diemenia speciosa Ettingshausen, 1887a, p. 108, pl. 11, figs. 7–9; leaf, Lauraceae; Eocene; Vegetable Creek, near Emma-ville, New South Wales.

DIEUNE Mueller, 1874.

Dieune plurioculata Mueller, 1874, p. 22, pl. 9, figs. 1–4; angiosperm fruit, affinities uncertain; lower Pliocene; Had-don, Victoria.

DIFURCOSPHENOPHYLLUM Lotsy, 1909.

Difurcosphenophyllum fertile (Scott) Lotsy, 1909, p. 526, fig. 350III. For *Sphenophyllum fertile* Scott, 1905. See also Leclercq, 1936.

DIGITELLA Morellet and Morellet, 1913.

Digitella dactyloporoides Morellet and Morellet, 1913, p. 28, figs. 14–16; alga, Bornetellaceae; Tertiary; Échampées, near Lizy-sur-Ourcq, France.

DIGITOLITHUS Fritsch, 1908.

Digitolithus rugatus Fritsch, 1908, p. 23, fig. 7; Silurian; Vorder-Treban, Bohemia.

DIGONOSPERMUM Renault, 1907.

Digonospermum grilletti Renault, in Bertrand, C. E., 1907, p. 222.

DIICHNIA Read, 1936.

Diichnia kentuckiensis Read, 1936, p. 151, pls. 30–33; petrified stem, *Eu-Calamopitys* group; Upper Devonian; Kentucky.

DILLENIAECARPUM Weyland, 1948.

Dilleniaecarpum rottense Weyland, 1948, p. 138, pl. 22, fig. 9; figs. 10–12; infructescence, Dilleniaceae; Tertiary; Rott, Siebengebirge, Germany.

DILLENITES E. W. Berry, 1916.

Dillenites microdentatus (Hollick) E. W. Berry, 1916a, p. 291, pl. 75, fig. 3; pl. 77, fig. 1; leaves, Dilleniaceae; Wilcox group, lower Eocene; Coushatta, Red River Parish, La.

DIALOGOPTERIS Grand'Eury, 1877.

Dialogopteris orbicularis Grand'Eury, 1877, p. 521; nom. nud.

DIMERIPTERIS Schmalhausen, 1894.

Dimeripteris fasciculata Schmalhausen, 1894, p. 30, pl. 1, figs. 10, 11; *Telan-gium*-like microsporangiate organs; Upper Devonian; Donets, Russia.

DIMORPHOSIPHON Hoeg, 1927.

Dimorphosiphon rectangulare Hoeg, 1927, p. 4, pls. 1-3; petrified alga, Codiaceae; Middle Ordovician; south of Bergviken. Island of Helgöen, Norway.

DIMORPHOSTROMA Reis, 1921.

Dimorphostroma varians Reis, 1921, p. 313; Tertiary; Rhenish Bavaria. See also Reis, 1923, pl. 4, fig. 12.

DINEURON Renault, 1896.

Dineuron pteroides Renault, 1896a, p. 22, fig. 19; coenopterid fern petiole; Esmont, France. See also Posthumus, 1931.

DIOONIPITES Wodehouse, 1933.

Dioonipites sp. Wodehouse, 1933, p. 484, figs. 4, 5; cycad pollen; Parachute Creek member, Green River formation. Eocene; Colorado and Utah.

DIOONITES Miquel, 1851.

Designation of a type species is problematical. *Dioonites feneonis* (Brongniart) Miquel, 1851b. For *Zamia feneonis* Brongniart, 1828b, p. 99, illustrated in Miller, 1857, p. 69, fig. 36. Other species described by Emmons, 1856, 1857; and Schenk, 1871.

DIOONITOCARPIDIUM Lillienstern, 1928.

Dioonitocarpidium pennaeforme (Schenk) Lillienstern, 1928, p. 103, pls. 5, 6; fig. 1; cycadophyte megasporophyll; Upper Triassic (Keuper); Estenfeld, Bavaria. For *Dioonites pennaeformis* Schenk, 1864b.

DIOONOPTERIS Goeppert, 1864.

Dioonopteris permica Goeppert, 1864, p. 126, pl. 13, figs. 3, 4; leaf fragment; Permian; Braunau, Bohemia.

DIOSCORITES Saporta, 1863.

Dioscorites resurgens Saporta, 1863, p. 42, pl. 4, fig. 5; leaf, Dioscoreae; Tertiary; France.

DIOSCOROIDES Fritel, 1904.

Dioscoroides lyelli (Watelet) Fritel, 1904, p. 233, figs. 1, 2; Eocene; Belleu, Paris, France.

DIOSPYROPHYLLUM Velenovsky, 1889.

Diospyrophyllum provectum Velenovsky, 1889, p. 50. For *Diospyros provecta* Velenovsky, 1884, p. 49, pl. 8, fig. 1-5, 10; Upper Cretaceous; Melnik, near Liebenau, Bohemia.

DIPHYLLITES Heer, 1883.

Diphyllites membranaceus Heer, 1883, p. 45, pl. 60, fig. 4a; leaf fragment, Leguminosae; Upper Cretaceous; Patoot, Greenland.

DIPLASIOPHYLLUM Frenguelli, 1943.

Diplasiophyllum hughesi (Feistmantel) Frenguelli, 1943a, p. 299, figs. 23, 24; sterile fern? frond; Rhaetic to Keuper; China, India, South Africa.

DIPLASTEROTHECA Hirmer, 1927.

Diplasterotheca exigua (Renault) Hirmer, 1927, p. 585; fertile pectopterid foliage; Permian; Autun, France. For *Pecopteris exigua* Renault, 1883, p. 115, pl. 19, figs. 13-18. Hirmer refers to Renault in Zeiller, 1890, p. 70-72.

DIPLAZITES Goeppert, 1836.

Diplazites emarginatus Goeppert, 1836, p. 274, pl. 16, fig. 12; fern pinnules; Carboniferous.

DIPLOCYMA Steinmann and Elberskirch, 1929.

Diplocyca elberskirchianum Steinmann and Elberskirch, 1929, p. C57, fig. 21; Lower Devonian; Wahnachtals near Sieburg, Germany.

DIPLODENDRON Eichwald, 1846.

Diplodendron hastatum Eichwald, 1846, p. 456. See also Eichwald, 1860, p. 225, pl. 17, figs. 3, 4; fern or cycadophyte stem?; upper Paleozoic; mines of Kloutschewsk, Orenbourg, Russia.

DIPLODICTYUM Braun, 1843.

Diplodictyum obtusilobum Braun, in Münster, 1843 (1839-43), p. 14, pl. 13, figs. 11, 12; Jurassic; Bayreuth, Bavaria.

DIPLOLABIS Renault, 1896.

Diplolabis forensis Renault, 1896a, p. 14, figs. 6-10; coenopterid fern.

DIPLOMASTIXIA Kirchheimer, 1934.

Diplomastixia carinat Kirchheimer, 1934b, p. 789, fig. 17; fruit, Cornaceae; Tertiary (Braunkohle); Germany.

DIPLOPHACELUS Corda, 1845.

Diplophacelus arboreus Corda, 1845, p. 87, pl. 55; fern petiole; Upper Carboniferous; Radnitz, Bohemia.

DIPLOPHRAGMIUM Reinsch, 1881.

Diplophragmium sp. Reinsch, 1881, p. 102; pl. 41, fig. 6; pl. 42, figs. 1-5; pl. 43, figs. 1-5; Pennsylvanian; Swickau, Saxony.

DIPLOPHYLLUM Velenovsky and Viniklar, 1929.

Diplophyllum cretaceum Velenovsky and Viniklar, 1929, p. 25, pl. 17, fig. 10; pl. 19, fig. 10; pl. 20, fig. 5; leaf, Leguminosae?; Cretaceous; Cernikov, Bohemia.

DIPLOPORA Schafhautl, 1863.

Diplopore annulata Schafhautl, 1863, p. 324, pl. 65e, fig. 6; alga, Dasycladaceae.

DIPLOPTERIDIUM Walton, 1931.

Diplopteridium teilianum (Kidston) Walton, 1931, p. 349, pl. 23; sphenopterid foliage, probably bore *Telanium*-like fructifications; Lower Carboniferous; Gwaenysgor, Flintshire, England.

DIPLOPTEROTESTA Nathorst, 1914.

Diplopterotesta spitzbergensis (Heer) Nathorst, 1914, p. 36, pl. 15, figs. 77-82; winged seed; Paleozoic; Robert-Tal, Spitzbergen.

DIPLOSPORITES Pia, 1927.

Diplosporites ovalis (Renault) Pia, in Hirmer, 1927, p. 122; Fungi Imperfecti, Mucedinaceae; Oligocene; Asson, France. For *Diplosporium ovale* Renault, 1899, p. 978, pl. 17, fig. 13.

DIPLOTAXIS Wood, 1861.

A generic name proposed for possible future reception of certain species of *Syringodendron*, Wood, 1861a, p. 238.

DIPLOTEGIUM Corda, 1845.

Diplotegium brownianum Corda, 1845, p. 112, pl. 59, figs. 3-7; incertae sedis; Upper Carboniferous; Radnitz, Bohemia.

DIPLOTESTA Brongniart, 1874.

Diplotesta grand'euryana Brongniart, 1874, p. 261, pl. 21, figs. 12-14; silicified seed; Carboniferous; St.-Étienne, France.

DIPLOTHECA Kidston, 1903.

Diplothea stellata Kidston, 1903a, p. 131; fructification allied to *Calymmatotheca* Stur; Machrihanish Water, Scotland. See also Kidston, 1906, p. 431, figs. 11a-e.

DIPLOTHMEMA Stur, 1877.

Diplothmema patentissimum (Ettingshausen) Stur, 1877, p. 128. For *Rhodea patentissima* Ettingshausen, in Stur, 1875, pl. 9; pteridosperm? foliage; Carboniferous (Culm); Altendorf.

DIPLOXYLON Corda, 1840.

Diploxylon elegans Corda, 1840, p. 25, pl. 1; Upper Carboniferous; Chomle, Bavaria.

DIPTERIPHYLLUM Krasser, 1896.

Dipteriphyllum cretaceum (Velenovsky) Krasser, 1896, p. 123, pl. 15, fig. 7.

DIPTERITES Kuntze, 1904.

Dipterites Kuntze in Post and Kuntze, 1904, p. 179.

DIPTEROCARPACEOPHYLLUM Kräusel, 1929.

Dipterocarpaceophyllum sumatrense Kräusel, 1929, p. 33, pl. 6, fig. 6; leaf fragment, Dipterocarpaceae; Pliocene?; Sungi Tjaban, Palembang, South Sumatra.

DIPTEROCARPOPHYLLUM Edwards, 1923.

Dipterocarpophyllum gregoryi Edwards, 1923, p. 160, pl. 5, fig. 2; leaf, Dipterocarpaceae; Tertiary; three-quarters of a mile north of Tichara village, southeast Burma.

DIPTEROCARPOXYLON Holden, 1916.

Dipterocarpoxyylon burmense Holden, 1916, p. 271, pl. 29, figs. 1-5; wood, considered to be related to *Hopea* or *Shorea* (Dipterocarpaceae); Tertiary; Burma. See also Edwards, 1931.

DIPTEROSPERMUM Goeppert, 1851.

Dipterospermum bignonioides Goeppert, in Weber, 1851, p. 223, pl. 25, fig. 5; seed impression, Bignoniaceae; Tertiary.

DISCINITES Karl Feistmantel, 1880.

Discinites bohemicus Karl Feistmantel, 1880, p. 303, fig. [unnumbered] p. 299; Upper Carboniferous; Bohemia.

DISCITES Harris, 1931.

Discites minutus Harris, 1931b, p. 6, pl. 7; liverwort?; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

DISCOPHORITES Heer, 1877.

Discophorites angustilobus Heer, 1877a, p. 145, pl. 58, figs. 18, 19; alga?; Cretaceous; St. Denis, Canton Freiburg, Switzerland.

DISCOPHYCUS Walcott, 1883.

Discophycus typicalis Walcott, 1883, p. 19, pl. 2, figs. 18, 18a; Utica slate, Silurian; Trenton, Oneida County, N. Y.

DISCOPHYLLUM Hall, 1847.

Discophyllum pettatum Hall, 1847, p. 277, pl. 75, fig. 3; plant or coral?; Hudson River group, Ordovician (?); Troy, N. Y.

DISCOPTERIS Stur, 1883.

Discopteris karwinensis Stur, 1883, p. 693, figs. 17a, 17b; fertile fern pinnule; Upper Carboniferous; Kattowitz, Silesia.

DISCOSTACHYS Grand'Eury, 1890.

Discostachys cebennensis Grand'Eury, 1890, pl. 8, fig. 2; described in text, p. 306 as *Androstachys cebennensis* Grand'Eury, but this is apparently a mistake. Grand'Eury's use of these names is quite confused; see *Androstachys*.

DISCOSTROBUS Krasser, 1906.

Discostrobus argunensis Krasser, 1906, p. 628, pl. 4, figs. 11-14; incertae sedis; Jurassic; Duroi on Argun River, Transbaikalia.

DISOMA Zalessky, 1915.

Russia, Comité géol. Mém., nouv. sér., no. 139, p. 30, St. Petersburg; Flagellatae; Permian (not seen). See Gothan, 1942b, 119.

DISPHENOPHYLLUM Lotsy, 1909.

Disphenophyllum romerii (Solms-Laubach) Lotsy, 1909, p. 525, fig. 349.

DISSOCLADELLA Pia, 1936.

Dissocladdella savitriae Pia, in Rao and Pia, 1936, p. 15, pl. 1, figs. 1-4; pl. 3, fig. 4; alga, Dasycladaceae; Miniyur group, uppermost Cretaceous; Trichinopoly district, India.

DISTICHOPHYLLITES Dusen, 1899.

Distichophyllites microphyllus Dusen, 1899, p. 105, pl. 11, fig. 11; small coniferous? foliage shoot; Oligocene; Rfo Condor, Chile.

- DISTICHOPHYTUM** Mägdefrau, 1938.
Distichophytum mucronatum Mägdefrau, 1938, p. 247, pl. 2, fig. 4; text fig. 3; Psilophytales; Lower Devonian; near Hahnenklee, Germany.
- DISTICHOPTERIS** Yabe and Shimakura, 1940.
Distichopteris heteropinna Yabe and Shimakura, 1940b, p. 179, pl. 16; fernlike foliage; Lungtan coal series, Permian; Lungtan coal mine, Chuyunghsien, Kiangsu, China.
- DISTICHOSTROBUS** Velenovsky and Viniklar, 1929.
Distichostrobis pusillus Velenovsky and Viniklar, 1929, p. 30, pl. 21, figs. 6, 7; inflorescence, compared with *Myrica*; Cretaceous; Slivenec, Bohemia.
- DISTRIGOPHYLLUM** Heer, 1876.
Distrigophyllum bicarinatum (Lindley and Hutton) Heer, 1876a, p. 39, pl. 17, fig. 10; leaf of arborescent lycopod?; Carboniferous; Switzerland.
- DJAMBIOXYLON** Kräusel, 1922.
Djambioxyylon sumatrense Kräusel, 1922, p. 272, pl. 2, fig. 2; pl. 5, fig. 7; wood, Sapindaceae?; Tertiary; Sumatra.
- DOBRUGEITES** Simionescu, 1940.
Dobrugeites vinassayi simionescu, 1940, p. 1, 3 pls.; alga; Mesozoic; Rumania.
- DODONAEITES** Saporta, 1865.
Dodonaeites decaisnei Saporta, 1865, p. 184, pl. 9, fig. 13; fruit, Sapindaceae; Miocene; Armissan, France.
- DOLATOPHYCUS** Fenton and Fenton, 1937.
Dolatophycus expansus Fenton and Fenton, 1937, p. 437, pl. 2, figs. 1, 2; alga; Allentown limestone, Cambrian; Raubsville, Northampton County, Pa.
- DOLEROPHYLLUM** Saporta, 1878.
Dolerophyllum goepperti (Eichwald) Saporta, 1878a, p. 872; Permian; Russia. For *Noeggerathia goepperti* Eichwald, 1860 (1860-68), p. 253, pl. 18, figs. 1-3.
- DOLEROPTERIS** Grand'Eury, 1877.
Doleropteris cuneata Grand'Eury, 1877, p. 195, pl. 16; fernlike? foliage; Carboniferous; Loire, France.
- DOLEROTHECA** Halle, 1933.
Dolerotheca fertilis (Renault) Halle, 1933, p. 44, pls. 9, 10; spore-bearing organ, Whittleseyinae; Upper Carboniferous; St.-Étienne, France.
- DOLICHITES** Unger, 1850.
Dolichites europaeus Unger, 1850a, p. 489; Miocene; Radoboj, Croatia. Earlier citation: Unger, 1839, p. 104; nom. nud. For illustrations, see Unger 1863 (1860-65), p. 25, pl. 6, figs. 6, 7.
- DOLIOSTROBUS** Marion, 1884.
Doliosstrobis sternbergi (Corda) Marion, 1884, p. 823; Coniferales; Tertiary; France. For *Araucaria sternbergii* Corda, 1842b, p. 63, pl. 1.
- DOMBEYOPSIS** Unger, 1850.
Dombeyopsis lobata Unger, 1850, p. 447. See also Unger, 1848, p. 47; nom. nud.
- DOMBEYOXYLON** Schenk, 1883.
Dombeyoxylon aegyptiacum Schenk, 1883a, p. 13. "Compared by Schenk with the wood of the Sterculiaceae, and especially with the recent genera *Ruizia* and *Guazuma*; by Felix with *Guazuma*; and by Schuster with *Eriodendron*," Edwards, 1931; Oligocene?; Egypt. See also Schenk, in Schuster, 1910, p. 12, pl. 3, fig. 18.
- DONEZELLA** Maslov, 1929.
Donezella lutugini Maslov, 1929, p. 125, pl. 71, figs. 5-9; Carboniferous; Donets Basin, Irmenski mine, Russia.
- DORATOPHYLLUM** Harris, 1932.
Doratophyllum astartensis Harris, 1932a, p. 36, pls. 2, 3; cycadophyte leaf; *Lepidopteris* bed, Rhaetic; Scoresby Sound, east Greenland.
- DORYANTHITES** Berry, 1911.
Doryanthites cretacea Berry, 1911b, p. 406, leaf, monocotyledon; Black Creek formation, Upper Cretaceous; North Carolina. See also Berry, 1914, p. 108, pl. 17, fig. 3.
- DORYCORDAITES** Zeiller, 1888.
Dorycordaites palmaeformis (Goeppert) Zeiller, 1888 (1886-88), pl. 93, figs. 1, 2; cordaitan leaf; mines of Meurchin, Upper Carboniferous; Pas-de-Calais, France. Generic name first introduced by Grand'Eury, 1877, p. 214.
- DOTHIDITES** Meschinelli, 1892.
Dothidites acericola (Heer) Meschinelli, in Saccardo, 1892, p. 771. See also Meschinelli, 1898, p. 44, pl. 14, fig. 15; fungus, on fossil maple leaf; Switzerland.
- DRACAEENITES** Saporta, 1861.
Dracaenites sepultus Saporta, in Heer, 1861, p. 144; stem impression, Monocotyledon; Oligocene; Aix, Provence, France.
- DRACAEENOPHYLLUM** Massalongo, 1858.
Dracaenophyllum venetum Massalongo, 1858b, p. 792.
- DREPANOLEPIS** Nathorst, 1897.
Drepanolepis angustior Nathorst, 1897, p. 21, pl. 1, figs. 16, 17; incertae sedis; Middle Jurassic; Cape Boheman, Spitzbergen.
- DREPANOPHYCUS** Goeppert, 1852.
Drepanophycus spinaeformis Goeppert, 1852b, p. 92, pl. 41, fig. 1; psilophyte stem impression; Devonian; Hackenberg, Hesse.
- DREPAZAMITES** Harris, 1932.
Drepanozamites nilssonii (Nathorst) Harris, 1932, p. 83, pls. 7, 8; leaf, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

DRIMYSOPHYLLUM Kirchheimer, 1937.

Drimysophyllum succineum Kirchheimer, 1937, p. 474, figs. 7, 8; leaf, Magnoliaceae; Tertiary; Germany.

DRUPA Lesquereux, 1861.

Drupa rhabdosperma Lesquereux, 1861b, p. 716, fig. 150; seed, incertae sedis; Tertiary; Brandon, Vt.

DRYANDROIDES Unger, 1850.

Dryandroides grandis Unger, 1850a, p. 428; leaf, Proteaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 169, pl. 41, figs. 11-14.

DRYANDROPHYLLUM Velenovsky, 1889.

Dryandrophyllum cretaceum Velenovsky, 1889, p. 53.

DRYOBALANOXYLON Berger, 1923.

Dryobalanoxylon tobleri (Kräusel) Berger, 1923, p. 146; wood, dicotyledon; Tertiary; Sumatra. For *Dipterocarpoxyylon tobleri* Kräusel, 1922, p. 263, pl. 1, fig. 5; pl. 2, fig. 6, etc.

DRYOBALANUS Landgrebe, 1842.

Dryobalanus basalticus Landgrebe, 1842, p. 813, pl. 11A, figs. 1-3; fruit, Fagaceae; Oligocene; Hersfeld near Homberg, Hesse.

DRYOPHYLLUM Debey, 1865.

Dryophyllum subcretaceum Saporta, 1865, p. 46; leaf, dicotyledon; Eocene; Sézanne, France. See also Saporta, 1868, p. 347, pl. 26, figs. 1-3.

DRYOPTERITES E. W. Berry, 1911.

Dryopterites macrocarpa (Fontaine) E. W. Berry, 1911a, p. 261; foliage, Polypodiaceae; Patuxent formation, Lower Cretaceous; Dutch Gap, Va. For *Aspidium macrocarpum* Fontaine, 1889, p. 103, pl. 17, fig. 2.

DRYOXYLON Schleiden, 1853.

Dryoxyton jenense Schleiden, in Schmid, 1853, p. 28; wood, compared with *Salix*?; Middle Triassic (Lower Muschelkalk); Wogau near Jena, Germany. First? illustrated species: *Dryoxyton chitaense* Yasui, 1928, p. 438, pl. 19, figs. 78, 79. See also Bancroft, 1932b.

DUISBERGIA Kräusel and Weyland, 1929.

Duisbergia mirabilis Kräusel and Weyland, 1929, p. 333, pls. 9-12; figs. 18, 19; Devonian; near Elberfeld, Germany.

DULAURENSIA E. M. Reid, 1930.

Dulaurensia pulchra E. M. Reid, 1930, p. 52, pl. 2, figs. 1-11; fruit, Epacridaceae; Tertiary (Eocene?); St. Tudy near Quimper, France.

DUNSTANIA Reid and Chandler, 1933.

Dunstanina ettingshauseni (Gardner) Reid and Chandler, 1933, p. 459, pl. 25, figs. 41-47; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

DUKANIA Kirchheimer, 1935.

Durania chrenbergi Kirchheimer, 1935, p. 291, fig. 7; seed, Symplocaceae; Tertiary; Konzendorf, Germany.

DURVILLIDES Squinabol, 1888.

Durvillides cocenicus Squinabol, 1888, p. 560, pl. 14, figs. 1, 2; alga, incertae sedis; Eocene; Liguria, Boccadasse, Italy.

DUTOITIA Hoeg, 1931.

Dutoitia pulchra Hoeg, 1931, p. 92, fig. 1; Psilophytales; Lower or Middle Devonian; between Knysna and Port Elizabeth, near Cape Town, South Africa.

DVINOPTERIDIUM Zalesky, 1937.

Dvinopteridium edemskii Zalesky, 1937a, p. 18, figs. 3, 4; fern foliage; Permian; Iesiptzevo village, Tantarion, Russia.

DYCTUOCAULUS Emmons, 1856.

Dycteucaulus striatus Emmons, 1856, p. 293, pl. 1, fig. 3; incertae sedis; Permian; Farmville, N. C.

DYOTHECA Hartung, 1938.

Sachs. geol. Landesanst. Abh., Band 18, p. 92 (not seen). See Gothan, 1942b, p. 120.

DYSTACTOPHYCUS Miller and Dyer, 1878.

Dystactophycus mamillanum Miller and Dyer, 1878, p. 3, pl. 3, fig. 4; plant?, appears similar to the problematical *Conostichus*; Cincinnati group, Silurian; near Morrow, Ohio.

E

EBENACITES Saporta, 1861.

Ebenacites rugosus Saporta, in Heer, 1861, p. 147; calyx, Ebenaceae; Eocene; Aix, Provence, France.

EBENOXYLON Felix, 1882.

Ebenoxylon diospyroides Felix, 1882a, p. 71, fig. 3; Tertiary; Antigua, West Indies.

EBORACIA Thomas, 1911.

Eboracia lobifolia (Phillips) Thomas, 1911, p. 388, fig. p. 387; fertile fern frond; Jurassic; Yorkshire, England.

ECHINOCARPEOPSIS Langeron, 1900.

Echinocarpeopsis fastigata Langeron, 1900, p. 346, pl. 2, fig. 9; leaf, compared with *Echinocarpus*; Eocene; Sézanne, France.

ECHINOCARPUS Emmons, 1857.

Echinocarpus sp. Emmons, 1857, p. 111, fig. 79; incertae sedis, described as "dry carpel, or seed vessel"; Triassic; Haw River, N. C.?

ECHINOSTACHYS Brongniart, 1828.

Echinostachys oblongus Brongniart, 1828a, p. 457, pl. 20, fig. 2; incertae sedis; Triassic; Sultz-les-Bains, Alsace-Lorraine, France.

ECHINOSTIPES Pomel, 1849.

Echinostipes nidiformis (Brongniart) Pomel, 1849, p. 346. For *Mantellia nidiformis* Brongniart, 1828, p. 101. See also Carruthers, 1870, p. 702, pl. 63, fig. 1.

ECHINOSTROBUS Schimper, 1870.

Echinostrobus sternbergii Schimper, 1870 (1869-74), p. 331, pl. 75, figs. 21-24; cone-bearing twigs, Coniferales; Jurassic; Solenhofen, Bavaria.

ECHITONIUM Unger, 1839.

Echitonium superstes Unger, 1839, p. 103; Miocene; Radoboj, Croatia.

EDRAXYLON Williamson, 1872.

Edraxyton sp. Williamson, 1872, p. 438, fig. 3; petiole of *Lyginopteris*; Upper Carboniferous; Oldham, England. See also Seward, 1917, p. 38, 47.

EHRETAECARPUM Menzel, 1913.

Ehretiaecarpum parvulum Menzel, 1913, p. 61, pl. 5, fig. 35; fruit, Boraginaceae; Tertiary (Braunkohle), near Herzogenrath, Germany.

EICHWALDIA Zalesky, 1927.

Eichwaldia biarmica Zalesky, 1927a, p. 40, pl. 12, fig. 3; Permian; southeast Russia.

EISDENIA Stockmans, 1936.

Eisdenia aacheniana Stockmans, 1946b, p. 23, pl. 1, fig. 1; Senonian; Eisden, Belgium.

EISOTHECARYON Mueller, 1877.

Eisothecaryon semiseptatum Mueller, 1877a (1877-79), no. 68, p. 178, pl. 15, figs. 1-5; upper Pliocene; Golgong, Australia.

EKSDALIA.

Error for *Eskdalia* Kidston, in Posthumus, 1931, p. 106.

ELAEAGNITES Heer, 1870.

Elaeagnites campanulatus Heer, 1870, p. 58, pl. 12, fig. 11; calyx; Miocene; Cape Staratschin, Spitzbergen.

ELAEOCARPEOPSIS Langeron, 1900.

Elaeocarpeopsis decora Langeron, 1900, p. 347, pl. 1, fig. 4; leaf, compared with *Echinocarpus*; Eocene; Sézanne, France.

ELAEOCARPITES Kuntze, 1904.

Elaeocarpites Kuntze, in Post and Kuntze, 1904, p. 193.

ELAEODENDROXYLON Platen, 1908.

Elaeodendroxylon polymorphum Platen, 1908, p. 120; wood; Miocene; Amethyst Mtn., Yellowstone Park, Wyo. See also Platen, 1909, p. 245, figs. 157-159.

ELAIOIDES Unger, 1850.

Elaioides fontanesia Unger, 1850a, p. 432, leaf, Oleaceae; Miocene; Galicia. See also Unger, 1850b, p. 125, pl. 14, fig. 12.

ELASMOPHYCOS Massalongo, 1859.

Elasmophycos cuneifolius (Kurr) Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Laminarites cuneifolius* Kurr, 1845, p. 13, pl. 2, fig. 2.

ELATERITES L. R. Wilson, 1943.

Elaterites triferns L. R. Wilson, 1943, p. 523, figs. 1-6; spores with elaters; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa.

ELATIDES Heer, 1876.

Elatides ovalis Heer, 1876c, p. 77, pl. 14, fig. 2; cone, Coniferales; Upper Jurassic; Ust-Balei, Siberia. [In 1876 Heer described *Elatides ovalis*, *E. brandtiana*, and *E. falcata*, the first two being based on cones whereas the last was based on a small twig with foliage. Nathorst, 1897, included all of these species under *E. curvifolia* (Dunker) Nathorst, 1897, p. 35, pl. 1, figs. 25-27; pl. 2, figs. 3-5.]

ELATOCLADUS Halle, 1913.

Elatocladus heterophylla Halle, 1913, p. 84, pl. 8, figs. 12-14, 17-25; coniferous foliage shoots; Jurassic; Hope Bay, Graham Land, Antarctic.

ELATOXYLON Hartig, 1848.

Hartig, 1848b, p. 139 proposed this genus for certain species included in *Thuoxylon* and presumably intended this new combination as *Elatoxylon juniperinum* (Unger) Hartig. For *Thuoxylon juniperinum* Unger, 1854c, p. 172, pl. 1, figs. 1-3.

ELEOXYLON Brongniart, 1849.

No new combination actually cited but evidently intended as *Eleoxylon acerosum* (Unger) Brongniart, 1849. For *Peuce acerosa* Unger, 1841 (1841-47), p. 14, pl. 3, figs. 1-4; coniferous wood; Miocene; Wurmberg, Styria. Renault, 1885, p. 166 cites *Eleoxylon acerosum* (Unger) Brongniart.

ELEUTHEROPHYLLUM Stur, 1877.

Eleutherophyllum mirabile (Sternberg) Stur, 1877, p. 65, pl. 18, figs. 1-7; articulate stem; Carboniferous (Culm).

ELONGATOSPORITES Willard Berry, 1937.

Elongatosporites reticulatus Willard Berry, 1937, p. 158, fig. 12; spore; Pennington coal, Mississippi; Cranmore Cove, Rhea County, Tenn.

ELTOVARIA David White, 1929.

Eltovaria bursiformis David White, 1929, p. 114, pl. 50, fig. 4; pteridosperm? cupule with seeds; Hermit shale, Permian; on Bright Angel Trail, below El Tovar, Ariz.

EMBOLIANTHEMUM Corda, 1874.

Embolianthemum truncatum Corda, in Feistmantal, Ottokar, 1874, p. 37; Upper Carboniferous; Bras, Bohemia.

EMBOTHRIOPHYLLUM Dusen, 1899.

Embothriophyllum dubium Dusen, 1899, p. 104, pl. 10, fig. 6; leaf compared with *Embothrium lanceolatum* Ruiz and Pavon; Oligocene; Río de las Minas near Punta Arenas, Chile.

EMBOTHRIOPSIS Hollick, 1912.

Embothriopsis presagita Hollick, 1912, p. 159, pl. 165, fig. 1; leaf, Proteaceae; Raritan formation, Upper Cretaceous; Glen Cove, Long Island, N. Y.

EMBOTHRITES Unger, 1850.

Embothrites borealis Unger, 1850a, p. 428; Proteaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 171, pl. 42, figs. 10-12.

EMPLECTOPTERIDIUM Kawasaki, 1934.

Emplectopteridium alatum Kawasaki, 1934 (1927-34), p. 143, pl. 52, figs. 138, 139; fern or pteridosperm foliage; Jido series, Bed D, Carboniferous; Kaech'ön, North Korea.

EMPLECTOPTERIS Halle, 1927.

Emplectopteris triangularis Halle, 1927, p. 122, pl. 31; pteridosperm foliage; Lower Shihhotse series; Permian; central Shansi, China.

ENANTIOLASTOS Goeppert and Berendt, 1845.

Enantiolastos viscidoides Goeppert and Berendt, in Berendt, 1845, p. 76, pl. 6, figs. 6, 7; fruit, Lorantheae; Miocene; Prussia.

ENANTIOPHYLLITES Goeppert and Berendt, 1845.

Enantiophyllites sendelii Goeppert and Berendt, in Berendt, 1845, p. 79, pl. 5, fig. 57; leaves, Leguminosae?; Miocene; Prussia.

ENCEPHALARTOPSIS Fontaine, 1889.

Encephalartopsis nervosa Fontaine, 1889, p. 174, pls. 70-72; cycadophyte leaf fragments; Potomac group, Lower Cretaceous; Fredericksburg, Va.

ENCOELITES Sternberg, 1833.

Encocelites mertensii Sternberg, 1833 (1820-38), p. 33, pl. 3, fig. 2; incertae sedis; Jurassic; Solonhofen, Bavaria.

ENCOELOCLADIUM Zigno, 1856.

Encoelocladium tortuosum Zigno, 1856 (1856-68), p. 7. For *Caulerpites tortuosus* Presl, in Sternberg, 1820-38, p. 103, pl. 29, fig. 1; alga; Jurassic; Solonhofen, Bavaria.

ENDOCALAMITES Grand'Eury, 1877.

Endocalamites approximatus (Schlotheim) Grand'Eury, 1877, p. 47. For *Calamites approximatus* Schlotheim, see Brongniart, 1828-38, p. 133, pl. 24; pl. 15, figs. 7, 8.

ENDOGENITES Brongniart, 1822.

Endogenites echinatus Brongniart, 1822, p. 301, pl. 16, fig. 2; cycad? trunk; Eocene; near Soissons, France.

ENDOGENOPHYLLITES McCoy, 1870.

Endogenophyllites wellingtonensis McCoy, in Wintle, 1870, p. 2; nom. nud.

ENDOLEPIS Schleiden, 1846.

Endolepis vulgaris Schleiden, in Schmid and Schleiden, 1846, p. 72, pl. 5, fig. 25.

ENDOSPORITES L. R. Wilson and Coe, 1940.

Endosporites ornatus L. R. Wilson and Coe, 1940, p. 184, pls. 1, 2; spore; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa.

ENDOXYLON Scott, 1925.

Endoxylon zonatum (Kidston) Scott, 1925, p. 579, pl. 3, figs. 19-21; petrified stem, Calamopityeae; Carboniferous Limestone series, Lower Carboniferous; Dalry, Ayrshire, Scotland. For *Calamopityx zonata* Kidston, in Scott, 1923, p. 133.

ENGELHARDTIOIDITES Robert Potonie, 1950.

Engelhardtoidites microcoryphaeus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 51, pl. B, fig. 8; pl. C, fig. 16; pollen, Juglandaceae; Miocene; Chât-Aquitain, Germany.

ENIGMOCARPON Sahni and Rode, 1937.

Enigmocarpon parijai Sahni and Rode, 1937, p. 168, pl. 1, figs. 8-15; petrified fruit; Lythraceae; Deccan Intertrappean series, Tertiary, probably Miocene; Mohgaon Kalan, 18 miles east of Chhindwara, India. Brief description without illustrations in Sahni, 1934, p. 317; full description in Sahni, 1943.

ENIGMOPHYTON Hoeg, 1942.

Enigmophyton superbum Hoeg, 1942, p. 88, pls. 36-40; Devonian; Planterygen, Spitzbergen.

ENISEIELLA Maslov, 1939.

Eniseiella asteroides Maslov, 1939, p. 288, pl. 1, figs. 1-6; pl. 2, figs. 1, 3-5; alga; lower Paleozoic; North Yenisei, USSR.

ENTOMOLEPIS Saporta, 1865.

Entomolepis cynarocephala Saporta, 1865, p. 55, pl. 2, fig. 3; cone, Coniferales; Miocene; Armissan, France.

ENTONEURON Geyler, 1875.

Entoneuron melastomaceum Geyler, 1875, p. 78, pl. 2, fig. 3; leaf fragment, Menispermaceae; Eocene; Pengaron, Borneo.

ENTOSTROMIUM Reinsch, 1881.

Entostromium sp. Reinsch, 1881, p. 55, pl. 12, figs. 1-9; Upper Carboniferous; Zwickau, Saxony.

ENYGMATOSTROBUS Kryshstofovich, 1915.

Enygmatostrobus dokturovskyi Kryshstofovich, 1915, p. 106, pl. 5, figs. 3-6; Jurassic; Tyrmadutz, Amur River, Siberia.

EOACHRAS E. W. Berry, 1915.

Eoachras eocenica E. W. Berry, 1915, p. 210, pl. 1; seed, compared with *Achras zapote* (Sapotaceae); Eocene; near Lexington, Holmes County, Miss.

EOANGIOPTERIS Mamay, 1950.

Eoangiopteris andrewsii Mamay, 1950, p. 440, pl. 9; petrified spore-bearing organs, Marattiaceae; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

EOCLADOPHORA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 121.

EOCLATHRUS Squinabol, 1888.

Eoclathrus fenestratus Squinabol, 1888, p. 552, pl. 16, fig. 3; alga?; Tertiary; Genoa, Italy.

EOCLEPSYDROPSIS Bertrand, 1909.

A name proposed by Bertrand for a hypothetical early zygopterid; Bertrand, 1909, p. 256.

EOGLOBELLA Bradley, 1931.

Eoglobella longipes Bradley, 1931, p. 44, pl. 22, fig. 3; alga?; Green River formation, Eocene; Asphalt Tunnel, Garfield County, Colo.

EOHEPATICA Heard and Jones, 1931.

Eohepatica dyfriensis Heard and Jones, 1931b, p. 330; liverwort, compared with *Marchantia*; Lower Downtonian, Silurian?; Llandovery district, Wales.

EOHYPSERPA Reid and Chandler, 1933.

Eohypserpa parsoni Reid and Chandler, 1933, p. 168, pl. 4, figs. 13-21; fruit, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

EOLIRION Schenk, 1869.

Eolirion primigenium Schenk, 1869, p. 20, pl. 7, fig. 4; palm leaf; Lower Cretaceous (Urgonian); Groditschitz, Austrian Silesia.

EOMASTIXIA Chandler, 1926.

Eomastixia bilocularis Chandler, 1926, p. 37, pl. 6, figs. 6a-c; endocarp, Cornaceae; upper Eocene; Hordle, Hampshire, England.

EOPHYTON Torell, 1867.

Eophyton linnaeanum Torell, 1867, p. 36, pl. 2, fig. 3; pl. 3, figs. 1-3; Lower Cambrian and Silurian; near Billingen, Sweden.

EOPTERIS Saporta, 1878.

Eopteris andegavensis Saporta in Crie, 1871b, p. 687; Lower Silurian; France. See also Saporta, 1878b, p. 769, fig.

EOPUNTIA Chaney, 1944.

Eopuntia douglassii Chaney, 1944, p. 507, pls. 1-5; stem and fruit impressions, Cactaceae; Middle Eocene; eastern Utah.

EORHACHIS Arnold, 1945.

Eorhachis lomarioides Arnold, 1945, p. 11, pl. 2; petrified fernlike petiole; Green River formation, Eocene; Eden valley petrified forest, 26 miles east of Farson, Sweetwater County, Wyo.

EORHAMNIDIUM E. W. Berry, 1919.

Eorhamnidium cretaceum E. W. Berry, 1919a, p. 113, pl. 28, fig. 10; leaf, Rhamnaceae; Tuscaloosa formation, Upper Cretaceous; Cottondale, Tuscaloosa County, Ala.

EOSPERMATOPTERIS Goldring, 1924.

Eospermatopteris textilis (Dawson) Goldring, 1924, p. 68, pls. 2-6; tree-fern stem casts; Upper Devonian; Gilboa, N. Y.

EOSTROBILUS Theron, 1900.

Eostrobilus gelisii Theron, 1900, p. 112, fig. 109; Lower Carboniferous; Cabrières, France.

EOTAXITES Brongniart, 1875.

Eotaxites sp. Brongniart, 1875, p. 1021; leaves, incertae sedis; Upper-Carboniferous; near Moulins, France.

EOZANTHOXYLON Reid and Chandler, 1933.

Eozanthoxylon glandulosum Reid and Chandler, 1933, p. 263, pl. 10, figs. 13, 14; fruit, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.

EPHEDRITES Goeppert and Berendt, 1845.

Ephedrites johnianus Goeppert and Berendt, in Berendt, 1845, p. 105, pl. 4, figs. 8-10; pl. 5, fig. 1; portion of shoot, Ephedraceae?; Miocene; Prussia.

EPHEDROPSIS Velenovsky and Viniklar, 1926.

Ephedropsis strobilifera Velenovsky and Viniklar, 1926, p. 44, pl. 4, figs. 5-12; pl. 3, fig. 7; seed cone, Taxodiaceae; Cretaceous; Vyserovice and Lipenec, Bohemia.

EPIMASTOPORA Pia, 1922.

Reference not seen. See Pia, in Zeitschr. Induktive Abstammungs, Band 30, p. 63, Berlin. See also Johnson, J. H., 1946.

EPIPHYTON Bornemann, 1886.

Epiphyton flabellatum Bornemann, 1886, p. 16, pl. 1, figs. 9-10; alga; Cambrian; Cuccuru, near Iglesias, Sardinia.

EPIPOLAIA C. E. Bertrand, 1898.

Epipolaia boweri C. E. Bertrand, 1898, p. 179, pl. 11, figs. 119-124; thallophyte, incertae sedis; Carboniferous; Broxburn, Scotland.

EQUIHENIA Meunier, 1886.

Equihenia rugosa Meunier, 1886, p. 567, pl. 29, fig. 4; plant or worm? tracks; Upper Jurassic; Equihen, Pas-de-Calais, France.

EQUISETIDES Schimper, 1869.

Equisetides giganteus (Lindley and Hutton) Schimper, 1869 (1869-74), p. 286. See also Lindley and Hutton, 1831-37, pl. 114.

EQUISETINA Zalesky, 1939.

Equisetina magnivaginata Zalesky, 1939b, p. 329, figs. 1-3; articulate stem fragment; Permian; Matveyevo, Kroutaia Katouchka, USSR.

EQUISETITES Sternberg, 1833.

Equisetites münsteri Sternberg, 1833 (1820-38), p. 43, pl. 16, figs. 1-5; stems with foliage and terminal cone of *Equisetum*-like plant; Upper Triassic (Keuper); Strullendorf near Bamberg, Germany.

EQUISETOSPORITES Daugherty, 1941.

Equisetosporites chinleana Daugherty, 1941, p. 63, pl. 34, fig. 4; spore with elaters, Equisetaceae; Triassic; near Holbrook, Ariz.

EQUISETOSTACHYS Jongmans, 1927.

Equisetostachys sp. Jongmans, 1927b, p. 48; nom. nud.

EREMOPHYLLUM Lesquereux, 1874.

Eremophyllum fimbriatum Lesquereux, 1874, p. 107, pl. 8, fig. 1; leaf, dicotyledon; Cretaceous; near Decatur, Nebr.

EREMOPTERIS Schimper, 1869.

Eremopteris artemisiaefolia (Sternberg) Schimper, 1869 (1869-74), p. 416, pl. 30, fig. 4; fernlike foliage; Carboniferous; Newcastle, England.

ERETMONIA DuToit, 1932.

Eretmonia natalensis DuToit, 1932, p. 381, pl. 40, figs. 9-12; staminate sporangio-phores of *Glossopteris*?; Beaufort series, Karroo system, Upper Permian; Bergville, Natal.

ERETMOPHYLLUM Thomas, 1914.

Eretmophyllum pubescens Thomas, 1914, p. 259, pl. 6; leaf, Ginkgoales; Grinstead plant bed, Jurassic; Cayton Bay, Yorkshire, England.

ERICIPHYLLUM Conwentz, 1886.

Ericiphyllum ternatum Conwentz, 1886, p. 114, pl. 11, figs. 11-13; shoot bearing foliage, in amber, Ericaceae; early Tertiary; West Prussia.

ERICIPITES Wodehouse, 1933.

Ericipites longisulcatus Wodehouse, 1933, p. 517, fig. 52; pollen, Ericaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

ERIOTESTA Brongniart, 1874.

Eriotesta velutina Brongniart, 1874, p. 256, pl. 23, figs. 4, 5; silicified seed; Carboniferous; St.-Étienne, France.

ERISIPHITES Pampaloni, 1902.

Erisiphites melilli Pampaloni, 1902, p. 125, pl. 10, fig. 8; fungus perithecia; Miocene?; Melilli, Sicily.

ERISTOPHYTON Zalesky, 1911.

Eristophyton beinertianum (Goepfert) Zalesky, 1911, p. 27, pl. 3, figs. 3-6; pl. 4, figs. 5, 7; petrified cordaitan stem; Lower Carboniferous.

ERNESTIA Florin, 1927.

Ernestia filiciformis (Schlotheim) Florin, 1927, p. 4; Coniferales; Lower Permian; widely distributed in central, western, southern Europe. See also Florin, 1929b, p. 404. This generic name proved to be preoccupied and was changed to *Ernestiodendron*, see below.

ERNESTIODENDRON Florin, 1934.

Ernestiodendron filiciforme (Schlotheim) Florin, 1934, p. 469. For *Ernestia filiciformis* (Schlotheim) Florin, 1927, p. 4. See also Florin, Rudolf, 1939, Palaeontographica, Band 85, Abt. B, p. 176.

ERVITES Saporta, 1862.

Ervites primaevus Saporta, 1862, p. 287, pl. 14, fig. 9; fruit, Leguminosae; Tertiary; Provence, France.

ERYSIPHITES Meschinelli, 1898.

Erysiphites protogaeus (Schmalhausen) Meschinelli, 1898, p. 15, pl. 9, fig. 4; Pyrenomycete; Tertiary.

ERYTHRINOXYLON Falqui, 1907.

Erythrinoxylon latiporosum Falqui, 1907, p. 11; wood; Oligocene; Sardegna, Italy.

ESCALLONITES Kuntze, 1904.

Escallonites Kuntze, in Post and Kuntze, 1904, p. 207.

ESCALONIIPHYLLUM Dusen, 1899.

Escaloniiphyllum sp. Dusen, 1899, p. 102, pl. 11, fig. 5; small leaf fragment compared with *Escallonia serrata* Smith; Oligocene; Chile.

ESKDALIA Kidston, 1903.

Eskdalia minuta Kidston, 1903a, p. 750, pl. 1, figs. 4-8; fern? stem compression; Cementstone series, Lower Carboniferous; near Holystone, Northumberland.

ETAPTERIS Paul Bertrand, 1907.

Etapteris tubicaulis (Goepfert) Paul Bertrand, 1907, p. 776; coenopterid petiole; Lower Carboniferous; Falkenberg, Silesia. For *Zygopteris tubicaulis* Goepfert, 1852b, p. 137, pl. 11, figs. 1-3. See also Bertrand, 1909, p. 72; Posthumus, 1931.

ETERODICTYON Peruzzi, 1881.

Eterodictyon textum (Heer) Peruzzi, 1881, p. 8, pl. 1, fig. 7; incertae sedis.

ETHERIDGEA Ettingshausen, 1893.

Etheridgea subglobosa Ettingshausen, 1893, p. 141. See also Ettingshausen, 1895, p. 46, pl. 4, fig. 3; fruit, Tiliaceae; Upper Cretaceous; Ipswich Road, Bahnstation, Australia.

ETTINGSHAUSENIA Stiehler, 1857.

Ettingshausenia cuneifolia (Bronn) Stiehler, 1857, p. 67. For *Credneria cuneifolia* Bronn, 1838 (1837-38), p. 583, pl. 28, fig. 11; Cretaceous (Cenomanian); Niederschoena, Saxony.

- EUCALYPTOPHYLLUM** Fontaine, 1889.
Eucalyptophyllum oblongifolium Fontaine, 1889, p. 325, pl. 162, fig. 4; leaf fragment, affinities with *Eucalyptus*?; Potomac group, Lower Cretaceous; near Brooke, Va.
- EUDAPHNIPHYLLUM** Conwentz, 1886.
Eudaphniphyllum nathorsti Conwentz, 1886, p. 95, pl. 10, fig. 1; leaf, in amber, Thymelaceae; Tertiary; West Prussia.
- EUGEINITZIA** Hollick and Jeffrey, 1909.
Eugeinitzia proxima Hollick and Jeffrey, 1909, p. 43, pls. 10, 25; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.
- EUGENIAITES** Loubiere, 1933.
 Soc. géol. France Bull. 1933, sér., 5^e, tome 3, p. 128; Myrtaceae; Tertiary (not seen). See Gothan, 1942b, p. 122.
- EULEPIDOPHLOIOS** Sterzel, 1907.
Eulepidophloios laricinus (Sternberg) Sterzel, 1907, p. 730; Carboniferous; Offenbourg, Baden. See Sternberg, 1825 (1820-38), Tentamen, p. xiii, pl. 11, figs. 2-4.
- EULITHOTHAMNION?**
Eulithothamnion suganum (Rothpletz) Trabucco, 1900, p. 715, pl. 11, fig. 12; alga; Miocene; Italy. Earliest reference?
- EUMUENSTERIA** Rothpletz, 1896.
Eumuensteria flagellaria (Sternberg) Rothpletz, 1896, p. 858. For *Münsteria flagellaria* Sternberg, 1833 (1820-38), p. 32, pl. 7, fig. 3; alga?; Eocene; Vienna.
- EUPECOPTERIS** Kidston, 1925.
Eupecopteris bucklandi (Brongniart) Kidston, 1925, p. 554, pls. 120, 122; peccopterid foliage; Radstockian series, Upper Carboniferous; Camerton, England.
- EUPHORBIOIDES** Weber, 1855.
Euphorbioides prisca Weber, 1855, p. 155, pl. 30, fig. 1; inflorescence. Euphorbiaceae; Miocene; Rhenish Prussia.
- EUPHORBIOPHLOIOS** Langeron, 1899.
Euphorbiophloios sezannensis Langeron, 1899, p. 451, pl. 5, fig. 4; stem impression, Euphorbiaceae?; Eocene; Sézanne, France.
- EUPHORBIOPHYLLUM** Ettingshausen, 1853.
Euphorbiophyllum stillingioides Ettingshausen, 1853, p. 77, pl. 26, figs. 1, 2; leaf, Euphorbiaceae; Tertiary; Haering, Austria.
- EUPHORBIOSPERMUM** Reid and Chandler, 1933.
Euphorbiospermum eocenicum Reid and Chandler, 1933, p. 290, pl. 12, figs. 20-25; seed, Euphorbiaceae; London Clay, Eocene; Minster, Kent, England.
- EUPHORBIOTHECA** Reid and Chandler, 1933.
Euphorbiothea sheppeyensis Reid and Chandler, 1933, p. 284, pl. 12, figs. 1-5; fruit, Euphorbiaceae; London Clay, Eocene; Sheppey, Kent, England.
- EUPHORBIOXYLON** Felix, 1887.
Euphorbioxylon speciosum Felix, 1887a, p. 525, pl. 25, figs. 4, 6, 7; wood, Euphorbiaceae; Tertiary?; Sabanilla, Colombia.
- EUPHORBITES** Martius, 1822.
Euphorbites cicatricosus Martius, 1822, p. 141. See also Artis, 1825, p. 15, pl. 15; sigillarian stem compression; Upper Carboniferous; England.
- EUPHORBOCARPUM** Knowlton, 1917.
Euphorbocarpum richardsoni Knowlton, 1917, p. 328, pl. 96, figs. 3, 4; fruit, Euphorbiaceae; Raton formation, Eocene; 5 miles south of Aguilar, Colo.
- EUPHORIAECARPUM** Menzel, 1913.
Euphoriaecarpum litchiforme Menzel, 1913, p. 43, pl. 4, figs. 28, 19; seed, Sapindaceae; Tertiary (Braunkohle); near Herzogenrath, Prussia.
- EUPHORIOPSIS** Massalongo, 1852.
Euphoriopsis phaetontis Massalongo, 1852a, p. 14, pl. 2, fig. 5; leaf, Sapindaceae.
- EUPSARONIUS** Presl, 1847.
Eupsaronius carbonifer (Corda) Presl, 1847, p. 289. For *Psaronius carbonifer* Corda, 1845, p. 95, pl. 28, figs. 1-4; *Psaronius* stem; Upper Carboniferous; Radnitz, Bohemia.
- EUROTITES** Meschinelli, 1892.
Eurotites elegans (Goeppert and Menge) Meschinelli, in Saccardo, 1892, p. 750. See also Meschinelli, 1898, p. 15; Pyrenomycete. For *Eurotium elegans* Goeppert and Menge, in Goeppert, 1853, p. 453.
- EURYCYCADOLEPIS** Seward, 1917.
Eurycycadolepis jenkinsiana (Tate) Seward, 1917, p. 496; cycad cone scale?; Uitenhage series, Wealden; Cape Colony, South Africa. For *Cyclopteris jenkinsiana* Tate, 1867, p. 130, pl. 6, fig. 4.
- EURYPHYLLUM** Ottokar Feistmantel, 1879.
Euryphyllum whittianum Ottokar Feistmantel, 1879, p. 26, pl. 21, figs. 1, 1a; leaf; Karharbari beds, Lower Gondwana; Burladi, India.
- EURYSACIS** Schulze, 1887.
Eurysacis squamosa (Heer) Schulze, 1887, p. 18. For *Cunninghamites squamosus* Heer, 1871b, p. 9, pl. 1, figs. 5-7.
- EURYSOLENPORA** Dietrich, 1930.
Eurysolenpora polypora (Quenstedt) Dietrich, 1930, p. 104, pl. 4; plant?; Jurassic.

EUSARCOPHYLLUM Zalesky, 1933.

Eusarcophyllum amadocum Zalesky, 1933c, p. 1390, figs. 4, 5; lycopod stem fragments?; Carboniferous?; Chakh-tionki, Donets, Russia.

EUSPHENOPTERIS (Weiss) Kidston, 1882.

Eusphenopteris tenella (Brongniart) Kidston, 1882, p. 7, pl. 1, figs. 1-5; fertile fernlike frond, referred tentatively to Hymenophyllaceae; Upper Carboniferous; Yorkshire, England.

EUTHYTHRITES Cookson, 1947.

Euthythyrites oleinites Cookson, 1947, p. 210, pl. 12, figs. 12, 13; ascomata, Microthyrlaceae; Oligocene-Miocene; Yallorn and Hazelwood, Victoria.

EVIOSTACHYA Stockmans, 1948.

Eviostachya hoefti Stockmans, 1948, p. 64, pl. 10, figs. 2-5a; Upper Devonian; Belgium.

EVODIOXYLON Chiarugi, 1933.

Evodioxylon oweni (Carruthers) Chiarugi, 1933, p. 137, pl. 20, fig. 2; pl. 21, figs. 1-4; pl. 22, figs. 1-3; dicotyledonous wood; Miocene and Cretaceous; Sec-gure, southern Italian East Africa (Somaliland) and Gargerre, Garseale, northern Italian East Africa. For *Caesalpinioxylon oweni* (Carruthers) Edwards, 1931.

EXCIPULITES Goeppert, 1836.

Excipulites neesii Goeppert, 1936, p. 262, pl. 36, fig. 4; perithecial organs on *Hymenophyllites* foliage; Upper Cretaceous; Waldenburg, Silesia. Mesh-nelli, 1892, p. 788, erroneously attributes this genus to Fries.

EXOGENITES Fischer de Waldheim, 1826.

Exogenites sp. Fischer de Waldheim, 1826, p. 18, plate [unnumbered]; Tertiary; near Moscow, Russia.

F

FABOIDEA Bowerbank, 1840.

Faboidea longiuscula Bowerbank, 1840, p. 104, pl. 15, figs. 1, 2; seed, Legumi-nosae?; Eocene; Sheppy, Kent, England.

FAGITES Goeppert, 1844.

Fagites gypsaceus Goeppert, in Wimmer, 1844, p. 219; nom. nud? Possibly intended as new name for the leaf described as *Fagus sylvatica* in Goeppert, 1842b, p. 219, pl. 67, fig. 1.

FAGOPHYLLUM Nathorst, 1888.

Fagophyllum gottschei Nathorst, 1888, p. 199, pl. 17, fig. 2; leaf, Miocene; Moriyo-shimura, Ugo province, Japan.

FAGOPSIS Hollick, 1909.

Fagopsis longifolia (Lesquereux) Hollick, 1909, p. 2, figs. 1, 2; leaf, Fagaceae; Miocene; Florissant, Colo.

FAGOXYLON Stopes and Fujii, 1910.

Fagoxylon hokkaidense Stopes and Fujii, 1910, p. 64, pl. 8, figs. 50-53; wood; Upper Cretaceous; Hokkaido, Japan. See also Edwards, 1931.

FANEROTHECA Frangueli, 1944.

Fanerotherca exstans Frenguelli, 1944b, p. 393, pls. 1-4; microsporangiate organ, Pteridospermae; Triassic; Cacheuta, Argentina.

FASCICULITES Cotta, 1832.

Fasciculites didymosolen (Sprengel) Cotta, 1832, p. 47, pl. 9, figs. 3, 4.

FASCIOSTELOPTERIS Stopes and Fujii, 1910.

Fasciostelopteris tansleyi Stopes and Fujii, 1910, p. 15, pl. 2, figs. 2, 3; dictyostellic fern stem, Cyatheaceae?; Upper Cretaceous; Hokkaido, Japan.

FASCITES Reinsch, 1881.

Fascites sp. Reinsch, 1881, p. 34, pl. 7a, figs. 7-10; pl. 7b, figs. 3, 4; pl. 10, figs. 5-8; Triassic (Keuper); Basel, Switzerland.

FAVULARIA Sternberg, 1825.

Favularia obovata Sternberg, 1825 (1820-38), Tentamen, p. xiii, a genus established for species which are now included in *Sigillaria*.

FAYOLIA Renault and Zeiller, 1884.

Fayolia dentata Renault and Zeiller, 1884b, p. 1393, figs. 1, 2; fish egg capsule (described as a plant). For recent discussion of *Fayolia* and related fossils, see Brown, R. W., 1950.

FEGONIUM Unger, 1847.

Fegonium vasculosum Unger, 1847 (1841-47), p. 103, pl. 27, figs. 7-9; Tertiary; Freystadt, Austria. Originally described by Unger, 1839b, as *Phegonium*; in 1884 Vater introduced *Phegonium* as "gen. nov." noting that Unger's *Phegonium* belongs to *Plataninum*. See discussion in Edwards, 1931, p. 40.

FEILDENIA Heer, 1878.

Feildenia rigida Heer, 1878a, p. 20, pl. 1, figs. 3-11; pl. 2, fig. 1; pl. 8, fig. 1; Miocene; Grinell Land, Arctic Ocean.

FEILDENIOPSIS Fontaine, 1889.

Feildenopsis crassinervis Fontaine, 1889, p. 205, pl. 85, fig. 5; leaf fragment, incertae sedis; Potomac group, Lower Cretaceous; Virginia.

FEISTMANTELIA Crie, 1889.

Feistmantelia americana Crie, 1889b, p. 23; nom. nud. See note under *Bottgeria*.

FEISTMANTELIA Ward, 1899.

Feistmantelia oblonga Ward, 1899, p. 693, pl. 169, fig. 19; seed, compared with *Araucarites*; Lower Cretaceous; Black Hills, S. Dak.

FEISTMANTELIA Zeiller, 1902.

Feistmantelia bengalensis Zeiller, 1902, p. 34, pl. 4, figs. 9, 10; cupular organ, Pteridospermae; Lower Gondwana; Passerabhua, India. See Seward, 1917, p. 140. See also *Ottokaria*, Zeiller, 1902.

FELIXIA Platen, 1908.

Felixia latiradiata Platen, 1908, p. 66, pl. 2, figs. 3, 4; wood, Leguminosae; Miocene-Pliocene; California.

FERONIA Carpentier, 1927.

Feronia seawardi Carpentier, 1927, p. 27, pl. 4, figs. 1-4; Wealden; Feron, Monfaux, France.

FERUGLIOA Frenguelli, 1944.

Ferugliaa samaroides Frenguelli, 1944b, p. 403, text fig. 1; pls. 1, 2; seeds, Corystospermaceae?; Triassic; Chubut, Argentina.

FICHELITES Unger, 1842.

Fichtelites articulatus Unger, 1842, p. 101; wood, Leguminosae; Tertiary; Austria.

FICOIDITES Artis, 1825.

Ficoidites verrucosus Artis, 1825, p. 10, pl. 10, stigmarian appendage; Carboniferous; near Wentworth, Yorkshire, England.

FICONIUM Ettingshausen, 1883.

Ficonium solandri Ettingshausen, 1883, p. 124, pl. 3, fig. 4; leaf, Moraceae; Eocene; Dalton near Gunning, Australia.

FICOPHYLLUM Fontaine, 1889.

Ficophyllum crassinerve Fontaine, 1889, p. 291, pls. 144-148; leaf, dictyoledon; Potomac group, Lower Cretaceous; Fredericksburg, Va.

FICOXYLON Kaiser, 1880.

Ficoxylon bohemicum Kaiser, 1880a, p. 309; wood, compared with *Ficus cordata*; Tertiary; between Kostenblatt and Zettow, Bohemia. Placed in *Ficoxylon tropicum* by Edwards, 1931. See *F. tropicum* (Schleiden) Felix, 1883a, p. 81, pl. 2, fig. 6.

FILICITES Schlotheim, 1820.

Filicites cyatheus Schlotheim, 1820, p. 403; for illustrations, see Schlotheim, 1804, pl. 7, fig. 11. A genus of miscellaneous fern foliage fragments; a type species seems meaningless because of the diversity of fossils assigned to it; compare, for example, Berry, 1922e, p. 162, pl. 6, fig. 4, and Crepin, 1875, pl. 6.

FIRMIANITES Cockerell, 1909.

Firmianites aterrimus Cockerell, 1909, p. 447, fig. 2; capsule, compared with *Firmana*; Eocene; Green River, Wyo.

FITTONIA Carruthers, 1870.

Fittonia squamata Carruthers, 1870, p. 690, pl. 56; cycadophyte trunk; Upper Cretaceous; Banchurch, Isle of Wight, England

FITTONITES Kuntze, 1904.

Fittonites Kuntze, in Post and Kuntze, 1904, p. 236.

FLABELLARIA Sternberg, 1822.

Flabellaria raphifolia Sternberg, 1822 (1820-38), p. 32, pl. 21; palm leaf; Oligocene; Haering, Tirol, Austria. This is selected as type, for the genus has been generally used for palm leaves; first species described by Sternberg, *F. borassifolia*, however, is a cordaitean leaf. See Seward, 1917, p. 233.

FLABELLICULA Reid and Chandler, 1926.

Flabellacula anglica Reid and Chandler, 1926, p. 141, pl. 9, figs. 12, 13; angiosperm fruit; Oligocene; Isle of Wight, England.

FLABELLITES.

Error for *Palmacites*, in Cuvier and Brongniart, 1822, p. 35.

FLABELLOPHYCOS Squinabol, 1890.

Flabellophycos ligusticus Squinabol, 1890, p. 199, pl. 12, fig. 1; incertae sedis; Tertiary; Italy.

FLEMINGITES Carruthers, 1865.

Flemingites gracilis Carruthers, 1865, p. 438, pl. 12, figs. A1-10; lycopod cone; Upper Carboniferous; Airdrie, Lanarkshire, Scotland.

FLICHEIA Pelourde, 1908.

Flicheia esnostensis Pelourde, 1908, p. 879, fig. 1; silicified fern petiole; Lower Carboniferous (Culm); Autun, France. See also Posthumus, 1931.

FLORENTINITES Spegazzini, 1924.

Florentinites arcata Spegazzini, 1924a, p. 104, figs. 7-10; foliage, monocotyledon?; Eocene; Patagonia.

FLORINITES Schopf, Wilson, and Bental, 1944.

Florinites antiquus Schopf, in Schopf, Wilson, and Bental, 1944, p. 58, figs. 4, 5; spore; near top of Tradewater group, lower Allegheny, Pennsylvanian; Soap Creek, Davis County, Iowa.

FLORISSANTIA Knowlton, 1916.

Florissantia physalis Knowlton, 1916, p. 270. For a flower (Convolvulaceae?) described, but not named, by Kirchner, 1898, p. 188, pl. 15, fig. 2.

FLOROPTERIS Achepohl, 1883.

Floropteris sp. Achepohl, 1883, p. 91, pl. 29, fig. 3; fernlike foliage; Upper Carboniferous; Westphalia.

FOERSTIA David White, 1923.

Foerstia ohioensis David White, in White, David, and Stadnichenko, Taisia, 1923, p. 240, pl. 5; pl. 6, figs. 1-5; alga?; Devonian; near Vanceburg, Ky.

FOLIOPTERIS Achepohl, 1883.

Foliopteris sp. Achepohl, 1883, p. 91, pl. 29, fig. 7; fernlike foliage fragment; Upper Carboniferous; Westphalia.

- FOLIUM** Elise Hofmann, 1932.
Folium sectum Elise Hofmann, 1932, p. 61, pl. 1, figs. 1-3; cuticular remains; Tertiary; Geiseltals, Germany.
- FOLLICULITES** Zenker, 1833.
Folliculites kaltennordhemensis Zenker, 1833b, p. 177, pl. 4A; fruit, Ranunculaceae?; Tertiary (Braunkohle); Weimar, Germany.
- FONTAINEA** Newberry, 1895.
Fontainea grandifolia Newberry, 1895, p. 96, pl. 45, figs. 1-4; leaf, Leguminosae; Raritan formation, Upper Cretaceous; Woodbridge, N. J.
- FORALITES** Rouault, 1850.
Foralites pomeli Rouault, 1850, p. 743; incertae sedis; Silurian; Bain, Guichen, etc., in Brittany, France. *See also* Delgade, 1886, p. 90, pls. 3, 13.
- FORBESIA** Thomas Johnson, 1912.
Forbesia cancellata Thomas Johnson, 1912, p. 177, pls. 13, 14; fern rachis?; Lower Carboniferous; near Bandon, County Cork, Ireland.
- FORCHHAMMERA** Goeppert, 1859.
Forchhammera silurica Goeppert, 1859, p. 438, pl. 34, fig. 5; plant?; Lower Silurian; Bornholm, Denmark.
- FORSKOHLEANTHIUM** Conwentz, 1886.
Forskohleanthium nudum Conwentz, 1886, p. 45, pl. 4, figs. 20-22; flower, in amber, Urticaceae; Tertiary; West Prussia.
- FORTISIA** Visiani, 1858.
Fortisia haidingeriana Visiani, 1858, p. 10, pl. 1, figs. 1-4; fern? pinnules; Eocene; Monte Promona, Italy.
- FRAASIA** Unger, 1850.
Fraasia sapindoides Unger, 1850a, p. 457; wood, Sapindaceae; Tertiary; Hungary.
- FRACASTORIA** Massalongo, 1858.
Fracastoria clavaeformis Massalongo, 1858b, p. 762; Eocene; Monte Bolca, Italy. *See also* *Fracastoria megapepo* Massalongo, 1857b, p. 777; nom. nud.
- FRAENA** Rouault, 1850.
Fraena sanctihilairei Rouault, 1850, p. 731; plant?; Silurian; Guichen, Brittany, France. *See also* Saporta, 1884, p. 54, pl. 8, fig. 3.
- FRAXINOIDITES** Robert Potonie, 1950.
Frazinoidites sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62.
- FRAXINOPSIS** Wieland, 1929.
Frazinopsis minor Wieland, 1929b, p. 448, fig. 5b; winged fruits, compared with *Frazinus*; Rhaetic; Minas de Petroleo, southwest of Mendoza, Argentina.
- FRENELITES** Endlicher, 1847.
Frenelites recurvatus (Bowerbank) Endlicher, 1847, p. 273. For *Cupressinites recurvatus* Bowerbank, 1840, p. 55, pl. 10, fig. 19.
- FRENELOPSIS** Schenk, 1869.
Frenelopsis hoheneggri (Ettingshausen) Schenk, 1869, p. 13, pl. 4, figs. 5-7; p. 5, figs. 1, 2; pl. 6, figs. 1-6; pl. 7, fig. 1; defoliated coniferous shoot?; Cretaceous.
- FRICIA** Velenovsky, 1885.
Fricia nobilis Velenovsky, 1885a, p. 8, pl. 3, figs. 1-3, 6, 11.
- FRUCTUS** Engelhardt, 1877.
Fructus polyspermus Engelhardt, 1877, p. 389, pl. 21, fig. 8; incertae sedis; Tschernowitz, Bohemia.
- FRULLANITES** Sadebeck, 1886?
Frullanites succini Sadebeck, 1886, p. 121; nom. nud.; moss; Tertiary; Prussia.
- FRUTICRISTATUM** Webster, 1920.
Fruticristatum iowense Webster, 1920, p. 288; marine alga; Devonian; Bloody Run, Floyd County, Iowa.
- FUCHSELIA** Endlicher, 1847.
Fuchselia schimperi Endlicher, 1847, p. 304. For *Strobilites laricoides* Schimper and Mougeot, 1844, p. 31, pl. 1; pl. 16; cone, Coniferales; Triassic; Soultz-les-Bains, Alsace-Lorraine.
- FUCITES** (Brongniart) Unger, 1839.
Fucites dubilis Unger, 1839, p. 101; nom. nud.
- FUCOIDES** Brongniart, 1823.
Fucoides orbignianus Brongniart, 1823, p. 308, pl. 19, fig. 1; Lower Cretaceous (Neocomian); Island of Aix, near La Rochelle, France. *See also* Brongniart, 1828a-38, p. 78, pl. 2, figs. 6, 7.
- FUNGITES** Hallier, 1865.
Fungites apoldensis Hallier, 1865, p. 191, pl. 9B; mycelium; Tertiary (Braunkohle); Apolda, Germany.
- FURCIFOLIUM** Kräusel, 1943.
Furcifolium longifolium (Seward) Kräusel, 1943a, p. 431, figs. 1-6; ginkgo-phyte, *Baiera*-like foliage attached to slender stems; Jurassic; Solenhofen, Bavaria.
- FURCOPORELLA** Pia, 1918.
Furcoporella diplopore Pia, in Trauth, 1918, p. 209, pl. 1, figs. 1, 2; alga, Dasycladaceae; Eocene; Radstadt, Austria.
- FURCULA** Harris, 1932.
Furcula granulifer Harris, 1932a, p. 4, pl. 1; leaf, dicotyledon; Rhaetic; Scoresby Sound, east Greenland.

FUSIDITES Meschinelli, 1898.

Fusidites sp. (Conwentz) Meschinelli, 1898, p. 78, fungus.

G

GALLA (Ludwig) Lesquereux, 1892.

Galla quercina Lesquereux, 1892, p. 58, pl. 7, fig. 2; oak gall?; Cretaceous; Ellsworth County, Kans. Generic name given by Ludwig, 1857, p. 90, but no species assigned.

GALLATINIA Walcott, 1914.

Gallatinia pertexa Walcott, 1914, p. 116, pl. 23, figs. 1, 2; alga; Algonkian; west of Hillsdale Post Office, Gallatin County, Mont.

GANGAMOPTERIS McCoy, 1875.

Gangamopteris angustifolia McCoy, 1875, p. 11, pl. 12, fig. 1; pl. 13, fig. 2; large net-veined leaf; Mudgee, New South Wales. For *Cyclopteris angustifolia* McCoy, 1847, p. 148, pl. 9, figs. 3, 3a.

GANGAMOPTERIOPSIS Zalesky, 1927.

Gangamopteropsis netchaevi Zalesky, 1927a, p. 41, pl. 16, figs. 1-5; pl. 17; leaf; Permian; near Voskressensky, Urals, Russia.

GANITROCERA Kirchheimer, 1934.

Ganitrocera holzapfeli Kirchheimer, 1934a, p. 770, fig. 4; seed, Cornaceae; Tertiary (Braunkohle); Herzogenrath, Germany. See also Kirchheimer, 1936a.

GARWOODELLA Paul, 1938.

Reference not seen; cited in Gothan, 1942b, p. 123.

GARWOODIA Wood, 1941.

Garwoodia gregaria (Nicholson) Wood, 1941, p. 222, pl. 14, figs. 1, 2; pl. 15, figs. 1-4; alga; Lower Carboniferous; Kershopefoot, Roxburghshire, Scotland.

GASTRIDIOPSIS Massalongo, 1851.

Gastridiopsis elisae Massalongo, 1851, p. 69; alga; Tertiary; Italy.

GASTROMYCES Ludwig, 1861.

Gastromyces farinosa Ludwig, 1861, p. 32, pl. 6, figs. 3, 3a-c; gasteromycete?; Upper Carboniferous Malowka, Tula, Russia.

GAUDRYA Grand'Eury, 1890.

Gaudrya trivalvis Grand'Eury, 1890, p. 308, pl. 4, fig. 12; petrified seed; Upper Carboniferous; St.-Étienne, France.

GAUSSIA Chachloff?, 1934.

Reference not seen; cited in Gothan, 1942b, p. 123.

GEASTERITES Pia, 1927.

Geasterites florissantensis (Cockerell) Pia, in Hirmer, 1927, p. 121, fig. 109; *Geaster*-like impression, Lycopodiaceae; Miocene; Florissant, Colo.

GEIETES Stenzel, 1872.

Geietes moussoni (Heer) Stenzel, 1872, p. 71.

GEINITZIA Endlicher, 1847.

Geinitzia cretacea Endlicher, 1847, p. 281. For *Sedites rabenhorstii* Geinitz, 1842 (1839-42), p. 97, pl. 24, fig. 5.

GEINITZIELLA Kuntze, 1904.

Geinitziella Kuntze, in Post and Kuntze, 1904, p. 245.

GEINITZITES Fontaine, 1899.

Geinitzites jenneyi Fontaine, in Ward, 1899, p. 681; coniferous twig impression; Lower Cretaceous; Black Hills, S. Dak. This is a "proposed" name; Fontaine describes the new species *Geinitzia jenneyi* on p. 676 and on p. 681 writes: "As *Geinitzia* is hitherto known from no strata older than the Younger Cretaceous, it may be found that our plant is an ancestral form of the true *Geinitzia*. In that case it would be fittingly named *Geinitzites jenneyi*."

GELEENITES Dijkstra, 1949.

Geleenites fascinus Dijkstra, 1949, p. 26, pl. 2, fig. 11; incertae sedis; South Limburg, Netherlands.

GELIDINIUM Debey and Ettingshausen, 1859.

Gelidinium trajectomosanum Debey and Ettingshausen, 1859a, p. 199, pl. 3, fig. 6h; alga; Cretaceous; Aachen, Rhenish Prussia.

GELLERA Hollick, 1931.

Gellera paradoxa Hollick, 1931, p. 9, pl. 2, figs. 1-3; base of stem and roots, fern?; specimen found in terminal moraine; transported from Triassic rock horizon; Arrochar, Staten Island, N. Y.

GENOITES Feruglio, 1942.

Genoites patagonica Feruglio, 1942, p. 104, pl. 1, figs. 3, 4; pls. 5, 6; Liassic; Rio Genoa Valley, Patagonia, Argentina.

GEOCARPUS Kinkelin, 1884.

Geocarpus miocaenicus Kinkelin, 1884, p. 256, pl. 3, figs. 14-18; Miocene; Frankfurt-Niederrad, Prussia.

GEONOMITES Visiani, 1864.

Geonomites saturnia Visiani, 1864, p. 456, pl. 21; palm leaf; Tertiary; Italy.

GEONOMITES Lesquereux, 1878.

Geonomites goldianus Lesquereux, 1878a, p. 115, pl. 4, fig. 9; palm leaf; South Mtn., Golden, Colo.

GERMANOPHYTON Hoeg, 1942.

Germanophyton psymphylloloides (Kräusel and Weyland) Hoeg, 1942, p. 98, fig. 20; stem, with cells of *Prototaxites* type, bearing large fan-shaped leaves; Lower Devonian; Kirchhunden, West-

- phalia. For *Prototarites psygmyphylloides* Kräusel and Weyland, 1930, Senckenbergiana, Band 12, p. 218.
- GERMARIA** Presl, 1838.
Germaria elymiformis Presl, in Sternberg, 1838 (1820-38), p. 188, pl. 49, figs. 1-9; cones?, incertae sedis; Rhaetic; Bayreuth, Bavaria.
- GETONITES** Ettingshausen, 1887.
Getonites wilkinsoni Ettingshausen, 1887, p. 130, pl. 15, figs. 11, 11a, 12; leaf, Combretaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.
- GIGANTONOCLEA** Koidzumi, 1936.
Gigantonoclea lagrelii (Halle) Koidzumi, 1936, p. 138. For *Gigantopteris lagrelii* Halle, 1927, p. 170, pl. 46; lower Shihotse series, Lower Permian; central Shansi, China.
- GIGANTOPTERIS** Schenk, 1883.
Gigantopteris nicotianaeifolia Schenk, 1883b, p. 256. For *Megalopteris nicotianaeifolia* Schenk, 1883b, p. 238, pl. 32, figs. 6-8; pl. 33, figs. 1-3; pl. 35, fig. 6; Upper Carboniferous; Lui-pakou, Hunan province, China.
- GIGANTOSPERMUM** Jongmans and Gothan, 1935.
Gigantospermum posthumi Jongmans and Gothan, 1935, p. 169, pl. 58, fig. 1; Upper Carboniferous; Djambi, Mengkarang, Sumatra.
- GIGARTINITES** Brongniart, 1849.
Gigartinites obtusus Brongniart, 1849, p. 59. For *Fucoides obtusus* Brongniart, 1828a-38, p. 60, pl. 8, fig. 4; alga?; Tertiary; Monte Bolca, near Verona, Italy.
- GILBERTINA** Ulrich, 1904.
Gilbertina spiralis Ulrich, 1904, p. 141, pl. 18, figs. 1, 2; plant?; Yakutat formation, Jurassic (Liassic); Pogibshi Island, Alaska.
- GILBOAPHYTON** Arnold, 1937.
Gilboaphyton goldringiae Arnold, 1937, p. 76, pl. 1; Psilophytales or Lycopodiales?; Middle Devonian; Gilboa, Schoharie County, N. Y.
- GINKGANTHUS** Nathorst, 1899.
Ginkganthus sp. Nathorst, 1899, p. 213, pl. 1, figs. 33, 49; microsporangiate organ, ginkgophyte; Jurassic; Franz Josef Land.
- GINKGOCLADUS** Ettingshausen, 1887.
Ginkgocladus novaezeelandiae Ettingshausen, 1887b, p. 179, pl. 7, fig. 19; leaf, incertae sedis; Upper Cretaceous; Wangapeka, Nelson, New Zealand.
- GINKGODIUM** Yokoyama, 1889.
Ginkgodium nathorsti Yokoyama, 1889, p. 57, pl. 2, fig. 4e; pl. 3, fig. 7; pl. 8; pl. 9, figs. 1-10; Lower Oolite, Jurassic; Shinamura, Yanagedani, Japan.
- GINKGOITES** Seward, 1919.
Ginkgoites obovata (Nathorst) Seward, 1919, p. 12, fig. 632; leaf, Ginkgoaceae; Rhaetic; Scania, Sweden.
- GINKGOPHYLLUM** Saporta, 1875.
Ginkgophyllum grasseti Saporta, 1875b, p. 1018; leaf, ginkgophyte?; Permian; Lodève, France. See also Saporta, 1879, p. 186, fig. 15.
- GINKGOPHYTON** Matthew, 1910.
Ginkgophyton leavitti Matthew, 1910, p. 87, pl. 4; ginkgophyte? leaves and associated seeds; Mississippian; Duck Cove, Lancaster, New Brunswick, Canada.
- GINKGOPHYTON** Zalesky, 1918.
Ginkgophyton sp. Zalesky, 1918, p. 47.
- GINKGOPSIS** Zalesky, 1918.
Ginkgopsis czekanowskii (Schmalhausen) Zalesky, 1918, p. 57, pl. 22, figs. 1-4; ginkgophyte leaf?; Mesozoic; Souka, Russia. This generic name mentioned in Zalesky, 1912, p. 28 (footnote), but no specific name assigned.
- GINKGOSPERMUM** Nathorst, 1878.
Ginkgospermum globulare Nathorst, 1878a, p. 12; nom. nud.
- GIRVANELLA** Nicholson and Etheridge, 1878.
Girvanella problematica Nicholson and Etheridge, 1878, p. 23, pl. 9, fig. 24; Silurian; Girvan District, Ayrshire, Scotland.
- GLEDITSCHIACANTHUS** Lakowitz, 1895.
Gleditschiacanthus alsaticus Lakowitz, 1895, p. 288, pl. 10, fig. 8; Oligocene; Brunstatt, Alsace-Lorraine.
- GLEDITSCHITES** Fritel, 1924.
Gleditschites dubium (Watelet) Fritel, 1924, p. 169, fig. 20A; fruit, Leguminosae; Belleu, France.
- GLEDITSIOPHYLLUM** E. W. Berry, 1910.
Gleditsiophyllum triacanthoides E. W. Berry, 1910a, p. 197; leaf, Rosales; Cretaceous; 3½ miles below Denbars Bridge, Tar River, Edgecomb County, N. C. This species apparently never illustrated; first species illustrated: *G. eocenicum* Berry, 1916b, p. 238, pl. 46, figs. 1-7.
- GLEICHENIOPSIS** Tutin, 1932.
Gleicheniopsis secunda (Heer) Tutin, 1932, p. 503, pl. 16; fertile fern frond fragment, Gleicheniaceae; Lower Cretaceous; Ritenbenk coal mine, Disko Island, Greenland.

GLEICHENITES Goeppert, 1836.

Goeppert, 1836, p. 181-187, described five species which in no way conform with modern usage, his plants being Carboniferous sphenopterids, neuropterids, etc. The following is suggested as a type species, being one of the first described which clearly conforms with the modern concept: *Gleichenites porsildi* Seward, 1926, p. 76, pl. 6, figs. 18, 19, 24, 27, 29-31; pl. 12, figs. 122, 124; *Gleichenia*-like frond; Cretaceous; Angiarsuit, Upernivik Island, Greenland. *See also* *Gleichenites coloradensis* (Knowlton) Andrews, in Andrews and Pearsall, 1941, p. 174, pl. 3, figs. 20-22, 24; pl. 4, figs. 26, 27, 29; pl. 7. *See also* Seward, 1910, p. 351, and 1926, p. 69.

GLEICHENOPHYCOS Massalongo, 1884.

Gleichenophycos granulosis Massalongo, in Capellini, 1884, p. 541; Upper Cretaceous; Granaglione, near Bologna, Italy.

GLENOPTERIS Sellards, 1900.

Glenopteris splendens Sellards, 1900, p. 182, pl. 37, fig. 1; pl. 38, fig. 1; pl. 40; fern frond, compared with *Protoblechnum* Lesquereux; Permian; $3\frac{1}{2}$ miles south of Banner City, Dickenson County, Kans.

GLOECAPSOMORPHA Zalesky, 1920.

Gloeocapsomorpha prisca Zalesky, 1920, p. 83, figs. 1-3; alga; Silurian.

GLOBULINEA Ulke, 1938.

Globulinea giganteus Ulke, 1938, p. 58, pl. 1, fig. 1; alga; Mississippian; "Washington, D. C." Type specimen on a step of the 16th Street entrance of the Baptist Memorial Church, Washington, D. C.!

GLOCKERIA Goeppert, 1836.

Glockeria marattioides Goeppert, 1836, p. 379, pl. 39, figs. 2, 3; fernlike foliage; Upper Carboniferous; Charlottenbrunn, Silesia.

GLOEOCAPSITES Zalesky, 1917.

Gloeocapsites sp. Zalesky, 1917, p. 34.

GLOECAPSOMORPHA Zalesky, 1917.

Gloeocapsomorpha prisca Zalesky, 1917, p. 36, pl. 2, figs. 4-7; pl. 3, fig. 2; Lower Silurian; Petrograd, Russia.

GLOIOCONIS Renault, 1896.

Gloioconis borneti Renault, 1896a, p. 446, fig. 94, pl. 88, fig. 12; alga; Permian; Lally, France.

GLORIOSITES Heer, 1855.

Gloriosites rostratus Heer, 1855, p. 83, pl. 30, fig. 6; rhizome, Liliaceae?; Tertiary; Oeningen, Switzerland.

GLOSSIFUNGITES Lomnicki, 1886.

Glossifungites saxicava Lomnicki, 1886, p. 99, pl. 3, figs. 64a, 64b; Upper Cretaceous; Rukow near Pomorzany, Galicia.

GLOSSOCARPELLITES Perkins, 1905.

Glossocarpellites parvus Perkins, 1905, p. 510, pl. 86, fig. 15; fruit; Tertiary; Brandon, Vt.

GLOSSOCHLAMYS Ettingshausen, 1879.

Glossochlamys transmutans Ettingshausen and Gardner, in Gardner and Ettingshausen, 1879, p. 31, pl. 3, fig. 3; fern? leaf; Eocene; Bournemouth, England.

GLOSSOPHIUM Massalongo, 1893.

Glossophium eocenum Massalongo, in Meschinelli and Squinaboli, 1893, p. 415. *See also* *Glossophium proliferum* Massalongo, 1857b, p. 777; nom. nud.

GLOSSOPHYCUS Saporta and Marion, 1881.

Glossophycus camillae Saporta and Marion, 1881, p. 89, fig. 26; alga?; Triassic; Cannet, France.

GLOSSOPHYLLUM Kräusel, 1943.

Glossophyllum florini Kräusel, 1943b, p. 61, pl. 2, figs. 9-11; pl. 3, figs. 6-10; ginkgophyte leaf; Triassic; Lunz, Austria.

GLOSSOPTERIS (Brongniart) Sternberg, 1825.

Glossopteris browniana Brongniart, 1833 (1828a-38), p. 223, pl. 62. *Glossopteris* was proposed by Brongniart, 1822, p. 232, as a section of *Filicites* and given generic rank by Sternberg, 1825 (1820-38), Tentamen, p. xv; thus earliest valid binomial would appear to be *Glossopteris dubia* (Brongniart) Sternberg, 1825 (1820-38), p. xv, but Brongniart's illustration (Brongniart, 1822, p. 232, pl. 2, fig. 4) which Sternberg refers to is doubtful. *See also* Seward, 1910, p. 496.

GLOSSOPTEROPSIS Zalesky, 1918.

Glossopteropsis angarica Zalesky, 1918, p. 51, pl. 8, figs. 1, 2; ginkgophyte leaf?; Permian; Bassin d'Angara, near Irbinskaia, Russia.

GLOSSOZAMITES Schimper, 1870.

Glossozamites oblongifolius (Kurr) Schimper, 1870 (1869-74), p. 163, pl. 71; cycadophyte foliage; Lower Jurassic (Lias); Württemberg.

GLOTTOPHYLLUM Zalesky, 1912.

Glottophyllum cuneatum Zalesky, 1912, p. 28 (footnote), pl. 5, fig. 4; ginkgophyte leaf?; Carboniferous; Kuznets Basin, Russia. *See also* Zalesky, 1918, p. 59, pl. 26, fig. 1.

GLUTOXYLON Chowdhury, 1936.

Glutoxylon assamicum Chowdhury, 1936, p. 508, pl. 7; wood, compared with *Gluta* (Anacardiaceae); middle Tertiary; Nailalung, Assam, India.

GLYPHOSTROMIUM Reinsch, 1881.

Glyphostromium sp. Reinsch, 1881, p. 58, pl. 14, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

GLYPTODENDRON Claypole, 1878.

Glyptodendron eatonense Claypole, 1878a, p. 303; arborescent lycopod stem impression; Upper Silurian; Clinton near Eaton, Ohio. *See also* Claypole, 1878b, p. 559, fig.

GLYPTOLEPIDIUM (Heer) Sordelli, 1896.

Glyptolepidium gornense Sordelli, 1896, p. 49, pl. 10, figs. 8, 9; coniferous twigs with foliage; Triassic; Gorno, Val Seriana, Italy. Generic name given by Heer, 1876c, p. 72, but no species named.

GLYPTOLEPIS Schimper, 1870.

Glyptolepis keuperiana Schimper, 1870 (1869-74), p. 244, pl. 76, fig. 1; coniferous foliage shoots?; Upper Triassic (Keuper); near Coburg, Germany.

GLYPTOSTROBITES Brongniart, 1849.

Glyptostrobitis acutifolius Brongniart, 1849, p. 123. Apparently first illustrated species: *G. parisiensis* Brongniart, in D'Orbigny, 1852 (1851-52), p. 775, fig. 596. *See also* Watelet, 1866, p. 116, pl. 31, fig. 3.

GLYPTOSTROBOXYLON Conwentz, 1885.

Glyptostroboxylon goepperti Conwentz, 1885, p. 445; coniferous wood; Lower Oligocene; Katapuliche, Argentina. First illustrated species: *G. tenerum* Prill and Kräusel, in Kräusel, 1919a, p. 264, pl. 18, fig. 12; pl. 20, figs. 6-7, 10.

GNETOPSIS Renault and Zeiller, 1884.

Gnetopsis elliptica Renault and Zeiller, 1884a, p. 57; seeds in cupule, Pteridospermae; Upper Carboniferous; Rive-de-Gier, France. *See also* Renault, 1885, p. 179, pl. 20, figs. 1-10; pl. 21, figs. 1-6; pl. 22, figs. 2-4.

GOEPPERTELLA Oishi and Yamasita, 1936.

Goeppertella microloba (Schenk) Oishi and Yamasita, 1936, p. 147. For *Woodwardites microlobus* Schenk, 1865-67, p. 68, pl. 13, figs. 11-13.

GOEPPERTIA Presl, 1838.

Goeppertia polypodioides Presl, in Sternberg, 1838 (1820-38), p. 121, pl. 50, fig. 1; fertile fern foliage fragment; Upper Carboniferous; near Plass, Bohemia.

GOLDENBERGIA Halle, 1933.

Goldenbergia glomerata Halle, 1933, p. 8, pl. 1, figs. 1a-19; pl. 3; synangium, probably pteridospERM; Upper Carboniferous; Saarbrücken, Germany.

GOLDSONIA Shrock and Twenhofel, 1939.

Goldsonia burntensis Shrock and Twenhofel, 1939, p. 247, pl. 27, figs. 2-4; alga; Pike Arm formation, Silurian; Burnt Island in Goldson Arm, New World Island, Newfoundland.

GOMPHOSTROBUS Marlon, 1890.

Gomphostrobus heterophylla Marion, 1890b, p. 894; araucarianlike foliage shoots; Permian; Lodeve, France. First illustrated species: *G. bifidus* (Geinitz) Zeiller and Potonie, in Potonie, Henry, 1900, p. 620, fig. 387.

GONATOBOTRYTITES Pia, 1927.

Gonatobotrytites primigenius (Caspary) Pia, in Hirmer, 1927, p. 122, fig. 111; Mucedinaceae, Fungi Imperfecti; Eocene; East Prussia.

GONDWANIDIUM Gothan, 1927.

Senckenberg. naturf. Gesell. Abh., 1927, Band 39, p. 342; Pteridospermae; Permian (not seen). *See also* Gothan, 1942b.

GONGROSTROMIUM Reinsch, 1881.

Gongrostromium sp. Reinsch, 1881, p. 58, pl. 13a, figs. 1-3; Carboniferous; Mittelbronn, Württemberg.

GONIOLINA d'Orbigny, 1850.

Goniolina hexagona d'Orbigny, 1850, p. 41; Upper Jurassic; Pointe-du-Che, near Rochelle, France. First illustrated species: *G. geometrica* Buvignier, 1852, p. 47, pl. 32, figs. 36, 37.

GONIOPHYCUS Saporta, 1884.

Goniophycus implexus Saporta, 1884, p. 53, pl. 8, fig. 4; Triassic; Draguignan, France.

GONATOSORUS Raciborski, 1894.

Gonatosorus nathorstii Raciborski, 1894, p. 173, pl. 9, figs. 5-11. *See also* *Gonatosorus* sp. Raciborski, 1889, p. 138.

GORDIA Emmons, 1844.

Gordia marina Emmons, 1844, p. 24, pl. 2, fig. 2; Cambrian; Jackson, Washington County, N. Y.

GOSSLINGIA Heard, 1927.

Gosslingia breconensis Heard, 1927, p. 198, pls. 13-15; petrified stem, Psilophytales; Senni beds, Lower Devonian; Brecon, South Wales.

GOTHANIA Hirmer, 1933.

Gothania westfalica Hirmer, 1933b, p. 138, pls. 17-22; petrified inflorescence, Cordaitales; middle Upper Carboniferous; Germany.

GOTHANIELLA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 124.

GOTHANOPTERIS Koldzum, 1936.

Gothanopteris bosschana Koldzum, 1936, p. 136. For *Gigantopteris bosschana* Gothan and Jongmans, 1935, Jaar. mijnwezen Nederlandse-Indië, 1930, Verh. boekdeel 59, p. 47, figs. 2-4; Carboniferous (Stephanian); Djambi, Sumatra.

GOULDINA J. H. Johnson, 1940.

Gouldina carbonaria J. H. Johnson, 1940, p. 583, pl. 3, fig. 1; calcareous alga, Cyanophyceae?; top of Weber formation, Pennsylvanian; Park County, Colo.

GOUPIOXYLON Schonfeld, 1947.

Goupioxylon stutzeri Schonfeld, 1947, p. 19, pl. 1, figs. 2-9; pl. 2, figs. 1-4; wood, Celastraceae; Tertiary; Colombia.

GRACILERECTUS Webster, 1920.

Gracilerectus hackberryensis Webster, 1920, p. 288; marine alga; lower Hackberry group, Devonian; Mason City, Iowa. See also *Gracilerectus delicatus* Fenton and Fenton, 1924, p. 21, pl. 1, figs. 9, 10.

GRAMINITES H. B. Geinitz, 1865.

Graminites feistmanteli H. B. Geinitz, 1865, p. 392, pl. 3, fig. 3; articulate? stem fragment; Upper Carboniferous; Bras, Belgium.

GRAMINOPHYLLUM Conwentz, 1886.

Graminophyllum succineum Conwentz, 1886, p. 15, pl. 1, figs. 18-24; flower, in amber, Gramineae; Tertiary; West Prussia.

GRAMMAEPHLOIOS Harris, 1935.

Grammaephloios ichtya Harris, 1935, p. 152, pls. 23, 25, 27, 28; leafy shoot, Lycopodiales; Thaumatopteris zone, Rhaetic; Scoresby Sound, east Greenland.

GRAMMATOPTERIS Renault, 1891.

Grammatopteris rigoloti Renault, 1891, p. 500; coenopterid fern; "Permo-Carboniferous"; France. See also Renault, 1896a, p. 46, pl. 30, figs. 9-10; pl. 31, fig. 1. See also Posthumus, 1931.

GRAMMITES Reinsch, 1881.

Grammites sp. Reinsch, 1881, p. 63, pl. 14c, figs. 1-8; pl. 15, figs. 1-8; Permian; Mittelbexbach, Bavaria.

GRAMMITITES C. F. W. Braun, 1840.

Grammitites humilis C. F. W. Braun, 1840, p. 96; nom. nud.

GRAMMOPHYLLUM C. F. W. Braun, 1840.

Grammophyllum lineatum C. F. W. Braun, 1840, p. 100; nom. nud.

GRAND'EURYA Stur, 1883.

Grand'Eurya autunensis Stur, 1883, p. 679, figs. 12a, 12b; petrified pinnules bearing marattiaceous sporangia; Permian; Autun, France.

GRAND'EURYA Zeiller, 1883.

Grand'Eurya coraloides (Gutbier) Zeiller, 1883, p. 207; pl. 12, figs. 1-6; fertile fern frond; Upper Carboniferous; France.

GRAND'EURYELLA C. E. Weiss, 1885.

Grand'Euryella renaulti (Stur) C. E. Weiss, 1885b, p. 492. For *Grand'Eurya renaulti* Stur, 1883, p. 678, fig. 12c.

GRANULARIA Pomel, 1849.

Granularia schlotheimi Pomel, 1849, p. 333; alga; Lower Jurassic (Lias); Metz. First species illustrated: *Granularia linearis* Zigno, 1856-68, p. 37, pl. 2, fig. 5.

GRANULATISPORITES Ibrahim, 1933.

Granulatisporites granulatus Ibrahim, 1933, p. 22, pl. 6, fig. 51; spore; Carboniferous.

GRAPHIOLITES Fritel, 1910.

Graphiolites sabaleos Fritel, 1910, p. 12, pl. 20, fig. 12; fungus, Basidiomycete?; Upper Paleozoic; Cessoy, France.

GRAYSONIA.

Mistake for *Greysonia*, in Butts, 1926, p. 76 and Mawson and Madigan, 1930, p. 426.

GREVILLEOPHYLLUM Velenovsky, 1889.

Grevilleophyllum constans Velenovsky, 1889, p. 53. For *Grevillea constans* Velenovsky, 1883, p. 28, pl. 1, figs. 6-10; Upper Cretaceous; Jinovic, Bohemia.

GREWIOPSIS Saporta, 1865.

Grewiopsis tiliacea Saporta, 1865, p. 50, leaf, Malvaceae; Eocene; Sézanne, France. See also Saporta, 1868, p. 406, pl. 33, fig. 12.

GREWIOXYLON Schuster, 1910.

Grewioxylon swedenborgii Schuster, 1910, p. 14, pl. 1, figs. 1-4; compared with *Dipterocarpoxyylon tobleri* Kräusel (see Kräusel, 1922, p. 263); Tertiary; East Indies.

GREYSONIA Walcott, 1914.

Greysonia basaltica Walcott, 1914, p. 109, pl. 17, figs. 1, 2; pl. 18, figs. 1, 2; alga?; Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

GRILLETIA Renault and Bertrand, 1885.

Grilletia sphaerospemii Renault and Bertrand, 1885, p. 1306; fungus, Chytridiaceae; Upper Carboniferous; Grand-Croix, France.

GRIPHOPORELLA Pia, 1915.

Griphoporella curvata (Gumbel) Pia, in Spitz and Dyhrenfurth, 1915, p. 62, pl. 1, fig. 11; alga, Siphonaceae Verticillatae; Triassic.

GRISTHORPIA Thomas, 1925.

Gristhorpia nathorsti Thomas, 1925, p. 335, pls. 11, 14, 16; infructescence; Caytoniales; Jurassic; Cayton Bay, Yorkshire, England.

GRUMILEOPHYLLUM Geyler, 1887.

Grumileophyllum attenuatum Geyler, 1887a, p. 494, pl. 35, figs. 4, 5; leaf fragments, Rubiaceae?; Eocene; Labuan, Borneo.

GUAJACITES Massalongo, 1858.

Guajacites heerii Massalongo, 1858b, p. 767.

GUEMBELINA (Munier-Chalmas) Morellet and Morellet, 1913.
Guembelina bellovacina Munier-Chalmas in Morellet and Morellet, 1913, p. 38; Eocene; Bracheux, France. Generic name given (nom. nud.) by Munier-Chalmas, 1877, p. 817.

GUILIELMITES Geinitz, 1858.
Guilielmites permianus Geinitz, 1858, p. 19, pl. 2, figs. 6-9; incertae sedis; Permian; Gröna near Chemnitz, Germany.

GUILIERIA Crie, 1885.
Guilliera sarthacensis Crie, 1885, p. 85; cycadophyte cone?; Jurassic (Oolite); Mamers, France.

GULPENIA Gothan and Jongmans, 1927.
Gulpenia limburgensis Gothan and Jongmans, in Jongmans, 1927a, p. 66; sphenopterid foliage; Upper Carboniferous; Limburg, Gulpen mine, Netherlands.

GUTBIERIA Presl, 1938.
Gutbieria angustoloba Presl, in Sternberg, 1838 (1820-38), p. 116, pl. 33, figs. 13a-e; fertile fern fragment; Upper Triassic (Keuper); Strahlendorf.

GUTTIFEROXYLON Kräusel, 1939.
 Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 93 (not seen, cited in Gothan, 1942b, p. 124).

GYMNOCAULUS Emmons, 1856.
Gymnocaulus alternatus Emmons, 1856, p. 289, pl. 1, fig. 4; fern? frond fragment; Permian; Madison, Stokes County, N. C.

GYMNOCODIUM Pia, 1927.
Gymnocodium bellerophontis (Rothpletz) Pia, in Hirmer, 1927, p. 59, fig. 36b; alga; Codiaceae; Upper Permian.

GYMNONEUROPTERIS Pia, 1924.
Gymnoneuropteris carinthiaca Pia, 1924, p. 553, pl. [unnumbered]; coenopterid fern; Carboniferous; Bleiberg, Carinthia. See also Hirmer, 1927, p. 515.

GYMNOSOLEN Steinmann, 1911.
Gymnosolen ramsayi Steinmann, 1911, p. 18, pl. 3; alga? (described as coelenterate). See Hirmer, 1927, p. 37; Johnson, J. H., 1943, p. 100.

GYMNOSTROBUS Bureau, 1914.
Gymnostrobus salisburyi Bureau, 1914, p. 165, pl. 38, figs. 1, 2; lycopod cone? compression; Lower Carboniferous (upper Culm); Tardivié, France.

GYNOTROCHOXYLON Kräusel, 1939.
 Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 97 (not seen, cited in Gothan, 1942b, p. 124).

GYROCALAMUS C. E. Weiss, 1884.
Gyrocalamus palatinus C. E. Weiss, 1884b, p. 152, pl. 4, figs. 3, 4; Upper Carboniferous; Alben, Rhenish Bavaria.

GYROCHORDA.
 See *Gyrochorte* Heer.

GYROCHORTE Heer, 1865.
Gyrochorte vermicularis Heer, 1865, p. 142, pl. 9, figs. 9, 10. [Name altered to *Gyrochorda* by Schimper, in Schimper and Schenk, 1879 (1879-90), p. 51.]

GYRODENDRON Ulrich, 1904.
Gyroendron emersoni Ulrich, 1904, p. 140, pl. 18, fig. 3; pl. 19, figs. 1, 2; plant?; Yakutat formation, Lower Jurassic; Pogibshi Island, opposite village of Kadiak, Alaska.

GYROGONITES Lamarck, 1804.
Gyrogonites medicagulina Lamarck, 1804, p. 356; Charophyte; Eocene; near Paris, France. First illustrated: Lamarck, 1807, p. 236, pl. 15, fig. 7. First? publication after 1820: Hirmer, 1927, p. 89, fig. 73. See also comment by Peck, R. E., 1934, p. 52.

GYROPHYLLITES Glocker, 1841.
Gyrophyllites kwassizensis Glocker, 1841, p. 322, fig. p. 322; whorl of leaves, equisetalean affinities?; Cretaceous (Cenomanian); Capellenberg, near Kwassitz, Moravia.

GYROPORELLA Gumbel, 1871.
Gyroporella annulata (Schafhaudel) Gumbel, 1871, p. 269, pl. 2, figs. 1a-1i; alga, Dasycladaceae.

GYROPTERIS Corda, 1845.
Gyropteris crassa Corda, 1845, p. 86, pl. 54, figs. 1-6; fern petiole fragment; Upper Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

H

HAASTIA Ettingshausen, 1887.
Haastia speciosa Ettingshausen, 1887b, p. 180, pl. 8, fig. 5; leaf fragment, Musaceae; Upper Cretaceous; Pakawau, Nelson, New Zealand.

HADROPHYCUS Fenton and Fenton, 1939.
Hadrophycus immanis Fenton and Fenton, 1939, p. 92, pl. 2, figs. 1-4; pl. 3, figs. 1, 2; alga; Nash formation, pre-Cambrian; Medicine Bow Mts., Wyo.

HAGENMULLERIA Munier-Chalmas, 1877.
Hagenmulleria, Munier-Chalmas, 1877, p. 817; nom. nud.

HAGIOPHYTON Corsin, 1948.
Hagiophyton sp. Corsin, 1948, p. 19, pls. 3, 4; tree fern; Westphalian D, Carboniferous; mines domaniales de la Sarre et de la Lorraine, France.

HAITINGERIA Krasser, 1916.
Haitingeria krasseri (Schuster) Krasser, 1916, p. 336. For *Cycadospadix krasseri* Schuster, 1911a, p. 51, pl. 5, fig. 11; Upper Triassic (Keuper); Lunz, Austria.

HAKEITES Saporta, 1861.

Hakeites deletus Saporta, in Heer, 1861, p. 137; leaf, Proteaceae; Eocene; St. Zacharie, France. First species illustrated: *H. major* Saporta, 1867, p. 85, pl. 9, fig. 5.

HALIMEDITES Liburnau, 1902.

Halimedites saportae Liburnau, 1902, p. 712, pls. 1, 2; alga; Tertiary; near Salzburg, Austria.

HALIMEDOPSIS Massalongo, 1859.

Halimedopsis tuna Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Corallinites tuna* Massalongo, 1856b, p. 232, pl. 3, fig. 2; Eocene; Val Grobe, Italy.

HALISERIDES Schimper, 1869.

Haliserides dechenianus (Goepfert) Schimper, 1869 (1869-74), p. 185, pl. 2, fig. 1; alga?; Lower Devonian.

HALISERITES Sternberg, 1833.

Haliserites reichii Sternberg, 1833 (1820-38), p. 34, pl. 24, fig. 7; alga; Eocene; Freiberg, Saxony.

HALLEIA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 125.

HALOCHARIS Miquel, 1853.

Halocharis longifolia Miquel, 1853, p. 49, pl. 5, figs. 4-6; leaf, monocotyledon?; Upper Cretaceous; Mt. St. Peter, Limburg, Belgium.

HALOCHLORIS Unger, 1842.

Halochloris cymodoceoides Unger, 1842 (1841-47), p. 55, pl. 18, figs. 1-3; *Uncertain sedis*; Eocene; Monte Bolca, Italy.

HALONIA Lindley and Hutton, 1833.

Halonias gracilis Lindley and Hutton, 1833 (1831-37), p. 13, pl. 86; lycopod stem impression; Upper Carboniferous; Low Moor, Yorkshire, England.

HALOPHYTIS Sang, 1885.

Halophytis magnum Sang, 1885, p. 213; petrified alga, compared with stalk of *Laminaria digitata*; Upper Carboniferous; Kirkcaldy, Fife, Scotland.

HALOPOA Torell, 1869.

Halopoa imbricata Torell, 1869, p. 7; Cambrian; Lugnas, Sweden.

HALOPTERIS Stur, 1883.

Halopteris typica Stur, 1883, p. 660, fig. 8, fertile fern pinnules; Upper Carboniferous; Schlatzlar, Bohemia.

HALORAGICARYA Reid and Chandler, 1933.

Haloragicya quadrilocularis Reid and Chandler, 1933, p. 413, pl. 21, fig. 25; fruit, Halorigaceae; London Clay, Eocene; Minster, Kent, England.

HALYMENITES Sternberg, 1833.

Halymenites schitzleinii Sternberg, 1833 (1820-38), p. 30, pl. 5, fig. 1; alga?; Jurassic; Solenhofen, Bavaria.

HALYSERITES Sternberg, 1833.

Halyserites reichii Sternberg, 1833 (1820-38), p. 34, pl. 24, fig. 7; alga?; Eocene; Schoena near Freiberg, Saxony.

HALYSIS Hoeg, 1933.

Halysis moniliformis Hoeg, 1933, p. 86, pl. 7, figs. 1-3; alga?; Ordovician; Vestre Katugleas, Holand, Norway.

HAMAMELIDANTHIUM Conwentz, 1886.

Hamamelidanthium succineum Conwentz, 1886, p. 93, pl. 9, figs. 26-29; flower, in amber, Hamamelidaceae; Tertiary; West Prussia.

HAMAMELIDOXYLON Lignier, 1907.

Hamamelidoxylon renaulti Lignier, 1907, p. 301; pl. 19, fig. 44; pl. 20, figs. 45-52; wood, dicotyledon; Cretaceous (Cenomanian); near Vimoutiers, France.

HAMAMELITES Saporta, 1865.

Hamamelites fothergilloides Saporta, 1865, p. 47; leaf, Hamamelidaceae; Eocene; Sézanne, France. See also Saporta, 1868, p. 393, pl. 32, fig. 3.

HAPALOPHLOEA Pia, 1937.

Hapalophloea scissa Pia, 1937, p. 834; alga, Chaetangiaceae; Permian; Guguk Bulat, Sumatra.

HAPALOPTERIS Stur, 1883.

Hapalopteris typica Stur, 1883, p. 660, fig. 8; Upper Carboniferous; Schatzlar, Bohemia.

HAPALOXYLON Renault, 1896.

Hapaloxyylon rochei Renault, 1896a, p. 361, pl. 76, figs. 1-8; coniferous wood?; Carboniferous.

HAPLOCALAMUS Unger, 1856.

Haplocalamus thuringiacus Unger, 1856, p. 155, pl. 1, figs. 1-3; pl. 4, fig. 12; stem, calamitean affinities?; Devonian Saalfeld, Thuringia. First citation: Unger, 1854; nom. nud.

HAPLOGRAPHITES Felix, 1894.

Haplographites cateniger Felix, 1894a, p. 274, pl. 19, figs. 5, 6; fungus mycelium and conidia?; Eocene; Perekeschkul near Baku, Transcaucasia. Meschinelli, 1898, p. 81, erroneously attributes this genus to Berkley and Broome.

HAPLOPHRAGMIUM Reinsch, 1881.

Haplophragmium sp. Reinsch, 1881, p. 119, pl. 52a, figs. 1-3; Upper Carboniferous; Zwickau, Saxony.

HAPLOPLECTITES Reinsch, 1881.

Haploplectites sp. Reinsch, 1881, p. 67, pl. 16b, figs. 1-7; pl. 17, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

- HAPLOPORELLA** Gümbel, 1871.
Haplopora eruca (Parker and Jones) Gümbel, 1871, p. 256, pl. D, figs. 1a-e.
- HAPLOSTIGMA** Seward, 1932.
Haplostigma irregulare (Schwarz) Seward, 1932, p. 359, pls. 23, 24; lycopod? stem; Bokkeveld series; Middle Devonian; Steytherville, Cape Province, South Africa.
- HARLANIA** Goeppert, 1851.
Harlantia hallii Goeppert, 1851, p. 189. See also Goeppert, 1852b, p. 98, pl. 41, fig. 4.
- HARRINGTONIA** Frenguelli, 1942.
Harringtonia argentinica (Arber) Frenguelli, 1942, p. 265, pl. 1, figs. 1-3; foliage, cycadophyte?; Triassic; Argentina.
- HARTZIA** Harris, 1935.
Hartzia tenuis Harris, 1935, p. 42, fig. 20; ginkgophyte leaf; Lepidopteris zone, Rhaetic; Scoresby Sound, east Greenland.
- HASPIA** Kräusel and Weyland, 1929.
Haspia devonica Kräusel and Weyland, 1929, p. 342, pl. 13, figs. 3, 4; Devonian; near Düsseldorf, Germany.
- HASTIMIMA** David White, 1908.
Hastimima whitei David White, 1908, p. 589, pl. 10, figs. 1-4; pl. 11, figs. 1-10; "Permo-Carboniferous"; northeast of Minas, Santa Catharina, Brazil. Name cited earlier in White, I. C., 1906, p. 379; nom. nud.
- HAUERA** Unger, 1845.
Hauera americana Unger, 1845, p. 228; wood; Tertiary; Antigua Island, West Indies. First? illustrated species: *H. bornensis* Engelhardt, 1870, p. 49, pl. 15, figs. 10-13.
- HAUSMANNIA** Dunker, 1846.
Hausmannia dichotoma Dunker, 1846, p. 12, pl. 5, fig. 1; pl. 6, fig. 12; incertae sedis; Wealden; near Buckenburgh, Hannover, Germany.
- HAWLEA** Corda, 1845.
Hawlea pulcherrima Corda, 1845, p. 90, pl. 57, figs. 7, 8; fern foliage with partly preserved sporangia; Upper Carboniferous; Bohemia.
- HAYDENIA** Seward, 1912.
Haydenia thryopteroides Seward, 1912, p. 14, pl. 2, figs. 26, 29; fertile fern foliage; Cyatheaceae?; Jurassic; Ishpushta, Afghanistan.
- HEDEIA** Cookson, 1935.
Hedeia corymbosa Cookson, 1935, p. 135, pl. 2, figs. 25-33; Psilophytales; Silurian; Mount Pleasant, Alexandra, Victoria, Australia.
- HEREDERAEPHYLLUM** Fontaine, 1889.
Hederaephyllum crenulatum Fontaine, 1889, p. 324, pl. 162, fig. 3; leaf, compared with *Hedera helix*; Potomac group, Lower Cretaceous; near Brooke, Va.
- HEREROIDITES** Robert Potonie, 1950.
Hederoidites megagertrudae Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 61, pl. 3, fig. 54; pollen, compared with *Hedera*; upper Pliocene; Chatt-Aquitain, Germany.
- HEREDOPHYLLUM** Velenovsky, 1889.
Hederophyllum primordiale (Saporta) Velenovsky, 1889, p. 50. For *Hedera primordialis* Saporta, 1879, p. 200, fig. 29; Cretaceous (Cenomanian); Vyserovic, Bohemia.
- HEDSTROMIA** Rothpletz, 1913.
Hedstromia halimodoides Rothpletz, 1913, p. 17, pl. 3; Upper Silurian; Lumme-lunds near Storbrut, Sweden.
- HEDYCHIOPHYLLUM** Principi, 1921.
Hedychiophyllum speciosum (Squinabol) Principi, 1921a, p. 62; Oligocene; Santa Guistina, Liguria, Italy.
- HEERIA** Stur, 1888.
Heeria lunzensis Stur, 1888a, p. 209; nom. nud.
- HELENIA** Zalesky, 1930.
Helenia inopinata Zalesky, 1930a, p. 740, pl. 73, fig. 1; impression of decorticated stem; Carboniferous; Podossino, Ourals, Russia.
- HELENIELLA** Zalesky, 1930.
Heleniella bellula Zalesky, 1930e, p. 663; Carboniferous; Donets Basin, Russia.
- HELENIODENDRON** Sze, 1936.
Geol. Soc. China Bull., 1936, v. 15, p. 113 (not seen, cited in Gothan, 1942b, p. 125).
- HELICITES** Crie, 1889.
Helicites atrocarpa Crie, 1889a, p. 17; nom. nud.
- HELICODAEMON**.
A name suggested as being more appropriate for the problematical *Daemonelix*, in Claypole, 1895, p. 113.
- HELICTOXYLON** Felix, 1882.
Helictoxylon speciosum Felix, 1882a, p. 66, pl. 1, fig. 1; silicified liana; Tertiary; Antigua, West Indies.
- HELIOPHYCUS** Miller and Dyer, 1878.
Heliophyucus stelliforme Miller and Dyer, 1878, p. 2, pl. 3, fig. 3; plant?; Cincinnati group, Silurian; Cincinnati, Ohio.
- HELITROPITES** Ettingshausen, 1868.
Heliotropites reussi Ettingshausen, 1868a, p. 221, pl. 37, figs. 7-12; seeds and leaf, Asperifoliae; Miocene; Priesen, Bohemia.

HELLEBORITES Heer, 1870.

Helleborites marginatus Heer, 1870, p. 63, pl. 7, figs. 17-21; fruit, Ranunculaceae?; Miocene; Cape Staratschin, Spitzbergen.

HELLIA Unger, 1839.

Hellia pulchella Unger, 1839, p. 101; Miocene; Radoboj, Croatia.

HELMINTHOIDA Schafhautil, 1851.

Helminthoida irregularis Schafhautil, 1851, p. 142, pl. 9, fig. 10; Eocene?; Bavaria.

HELMINTHOIDICHNITES Fitch, 1850.

Helminthoidichnites tenuis Fitch, 1850, p. 868, fig. [unnumbered]; Cambrian; Middle Granville, N. Y.

HELMINTHOLITHUS Corda, 1842.

Helmintholithus antiquus Corda, 1842, p. 9; nom. nud.

HELMINTHOPSIS Heer, 1877.

Helminthopsis magna Heer, 1877a, p. 116, pl. 47, figs. 1, 2; marine alga; Jurassic; Switzerland.

HELOPHYTON Williamson, 1881.

Helophyton williamsonis (Cash and Hick) Williamson, 1881, p. 124, incertae sedis; Halifax bed, Upper Carboniferous. See also Williamson, 1883, p. 459.

HELVIENSIS Lima, 1896.

Helviensis delgadoi Lima, 1896, p. 94, pls. 1-4; Lower Silurian; near Elvas, Portugal.

HEMIONITITES Saporta, 1865.

Hemionitites scolopendrioides Saporta, 1865, p. 37, pl. 2, fig. 5; pl. 5, fig. 5a; fern pinnule; Miocene; Armissan, France.

HEMIPHONICITES Visiani, 1864.

Hemiphonocites dantesiana Visiani, 1864, p. 451, pl. 18; palm leaf; Tertiary; Italy.

HEMITELITES Goeppert, 1836.

Hemitelites cibotoides Goeppert, 1836, p. 330; pectopterid foliage; Carboniferous; Saarbruck. For *Pecopteris hemiteloides* Brongniart, 1828-38, p. 314, pl. 108, figs. 1, 2.

HEMITRAPA Miki, 1941.

Hemitrapa trapelloidea Miki, 1941, p. 289, pl. 7; fruit, Hydrocaryaceae; lower Pliocene; central Honu, Japan.

HEPATICITES Walton, 1925.

Hepaticites kidstoni Walton, 1925a, p. 565, pl. 13, figs. 1-4; leafy liverwort; Middle Coal Measures, Upper Carboniferous; Preesgweene Colliery, Preesgweene, Shropshire, England.

HERACLEITES Kinkelin, 1908.

Heracleites mobiusi Kinkelin, 1908, p. 248, pl. 32, fig. 14; Upper Pliocene; Klarbecken, near Niederrad, Hesse.

HERMITELLA Munier-Chalmas, 1877.

Hermitella sp. Munier-Chalmas, 1877, p. 817; nom. nud.

HEROUVALINA Steinmann, 1899.

Herouvalina herouvalensis (Munier-Chalmas) Steinmann, 1899, p. 153, figs. 20, 21; siphonaceous alga; Eocene; Herouval, France.

HERPERIDOPHYLLUM Massalongo, 1858.

Hesperidophyllum senogallensis Massalongo, 1858a, p. 87, pl. 28, fig. 13; leaf, dicotyledon; Miocene; Sinigaglia. Name first cited in Massalongo, 1857a, p. 777; nom. nud.

HETERANGIUM Corda, 1845.

Heterangium paradoxum Corda, 1845, p. 22, pl. 16; pteridosperm stem; Carboniferous; Radnitz, Bohemia.

HETEROCALYX Saporta, 1873.

Heterocalyx ungeri Saporta, 1873a, p. 111, pl. 16, figs. 19-26; calyx, Anacardiaceae; Tertiary; France.

HETEROCLADISCOS Ettingshausen, 1887.

Heterocladiscos thujoideus Ettingshausen, 1887a, p. 90, pl. 3, figs. 5-7; foliage shoot, Cupressineae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

HETEROFILICITES E. W. Berry, 1905.

Heterofilicites anceps E. W. Berry, 1905, p. 154, pl. 26; fertile fern frond fragments; Cliffwood clays, Cretaceous; Kinkora, N. J.

HETEROLEPIS E. W. Berry, 1914.

Heterolepis cretaceus E. W. Berry, 1914a, p. 27, pl. 3, fig. 3; cone scale, cycad or conifer?; Black Creek formation, Upper Cretaceous; Rocky Point, Sumter County, S. C.

HETEROPTERIS Henry Potonie, 1893.

See Potonie, Henry, 1893b, p. 44, 45; a new name intended for *Sphenopteris essinghii* Andrä, 1866 (1865-69), p. 20, pl. 7, figs. 2, 3; Upper Carboniferous; Eschweiler, Saarbrücken, Rhenish Prussia.

HETEROSPORITES Renault, 1901.

Heterosporites mischotheca Renault, 1901a, p. 208; nom. nud.

HETEROSPORITES Kuntze, 1904.

Heterosporites Kuntze, in Post and Kuntze, 1904, p. 278.

HETEROTHECA Benson, 1922.

Heterotheca grievii Benson, 1922, p. 122, pls. 4, 5; microsporangiate organ attributed to *Heterangium*; Calcareous Sandstone series, Lower Carboniferous; Pettycur, Scotland.

HETEROXYLON Hartig, 1848.

Heteroxylon seyfferti Hartig, 1848a, p. 169; wood; Tertiary; Germany.

HEXAGONARIA Deecke, 1901.

Hexagonaria senonica Deecke, 1901, p. 473, figs. 1, 2; alga?; Upper Cretaceous (Senonian); Rügen, Prussia.

HEXAGONOCARPUS Renault, 1890.

Hexagonocarpus crassus Renault, in Renault and Zeiller, 1890, p. 649, pl. 72, figs. 53-55; seed; Upper Carboniferous; Commentry, France.

HEXAPTEROCARPUS Carpentier, 1920.

Hexapterocarpus sp. Carpentier, 1920, p. 118, pl. 1, fig. 9; pl. 2, fig. 7; winged seeds; Carboniferous (Westphalien); Bassin du Pas-de-Calais, France.

HEXAPTEROSPERMUM Brongniart, 1874.

Hexapterospermum stenopterum Brongniart, 1874, p. 254, pl. 22, figs. 12, 13; silicified seed; Carboniferous; St.-Étienne, France.

HIBISCOXYLON Kräusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 73; Malvaceae; Upper Cretaceous (not seen). See Gothan, 1942b, p. 126.

HICKLINGIA Kidston and Lang, 1923.

Hicklingia edwardi Kidston and Lang, 1923a, p. 407, pl. 53; psilophyte; middle Old Red Sandstone, Devonian; Hill of Forss, Waas, Caithness, Scotland.

HICOROIDES Perkins, 1904.

Hicoroides angulata Perkins, 1904, p. 183, pl. 76, figs. 28, 32, 33; fruit; Tertiary; Brandon, Vt.

HIERACITES Saporta, 1861.

Hieracites salyorum Saporta, in Heer, 1861, p. 146; leaf, Chicoraceae; Eocene; Aix, Provence, France. See also Saporta, 1862, p. 262, pl. 11, fig. 1.

HIEROGAMMA.

Mistake for *Hierogramma*, in Read, 1936, p. 223.

HIEROGRAMMA Unger, 1856.

Hierogramma mysticum Unger, 1856, p. 172, pl. 8, figs. 5-10; regarded as identical with *Cladoxylon* by Bertrand; Upper Devonian; Saalfeld, Thuringia. See also Seward, 1917, p. 200; and Posthumus, 1931.

HIGHTEA Bowerbank, 1840.

Hightea elliptica Bowerbank, 1840, p. 32, pl. 8, figs. 7-9; fruit, Malvaceae?; London Clay, Eocene; Sheppey, Kent, England.

HILDESHEIMIA Florin, 1936.

Hildesheimia safeldi (Lipps) Florin, 1936b, p. 37, pl. 6, fig. 5; ginkgophyte; Cretaceous; Hildesheim, Germany.

HIMANTHALIOPSIS Zalesky, 1915.

Himantaliopsis sniatkovi Zalesky, 1915, p. 47, pl. 2, fig. 5; pl. 5, figs. 5-7, 9; pl. 12, figs. 5-8; Carboniferous; Russia.

HIMANTHALITES Fischer-Ooster, 1858.

Himantthalites taeniatus (Kurr) Fischer-Ooster, 1858, p. 54, pl. 3, fig. 4; alga?; Lower Jurassic (Lias); Fallbrach near Blumenstein, Switzerland.

HIMANTITES Meschinelli, 1892.

Himantites alopecurus (Debey and Ettingshausen) Meschinelli, in Saccardo, 1892, p. 801. See also Meschinelli, 1898, p. 95, pl. 26, figs. 7, 8.

HIMANTOPHYTON Matthew, 1913.

Himantophyton castorensense Matthew, 1913, p. 87, pl. 1, psilophyte?; Silurian; New Brunswick, Canada.

HIPPOCRATEITES Kuntze, 1904.

Hippocrateites Kuntze, in Post and Kuntze 1904, p. 282.

HIPPOCRATEOXYLON Hermann Hofmann, 1884.

Hippocrateoxylon javanicum Hermann Hofmann, 1884b, p. 28; Tertiary; near Indramaju, Java. See also Hofmann, 1884.

HIPPODOPHYCUS Hall and Whitfield, 1872.

Hippodophycus cowlesi Hall and Whitfield, 1872, p. 204; Devonian (Chemung); Salamanca, Cattaraugus County, N. Y.

HIPPURIDELLA Edwards, 1932.

Hippuridella stacheana Edwards, 1932, p. 213, pl. 10, figs. 1, 2; compared with *Hippurus* (Hippuridaceae); Lower Eocene; Gorge of the Foiba, Pisino, Central Istria. For *Astrocharas* Stache, 1872a, p. 316; *Astrochara liburnica* Stache, 1880, p. 201; and *Hipuridella* Stache, 1889, p. 87; all nom. nud.

HIPPURITES Lindley and Hutton, 1834.

Hippurites gigantea Lindley and Hutton, 1834 (1831-37), p. 87, pl. 114, calamitean stem impression; Upper Carboniferous; Jarrold Colliery, near Newcastle-upon-Tyne, England.

HIPURIDELLA Stache, 1889.

Hipuridella sp. Stache, 1889, p. 87; nom. nud. See *Hippuridella*, Edwards.

HIRAEOCARPUM Lakowitz, 1895.

Hiraeocarpum parvulum Lakowitz, 1895, p. 276, pl. 9, fig. 16; Oligocene; Brunnstatt, Alsace-Lorraine.

HIRMERIA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 126.

HIRMERIELLA Hörhammer, 1933.

Hirmeriella rhatolassica Hörhammer, 1933, p. 29, pls. 5-7; seed cone, Coniferales; Rhaetic; France.

HISINGERA Miquel, 1842.

Hisingera mantelli Miquel, 1842, p. 62. For *Cycadites brongniarti* Mantell, 1833, p. 338, fig.

- HOLCODENDRON** Quenstedt, 1867.
Holcodendron sp. Quenstedt, 1867, p. 867, pl. 82, fig. 4; Lower Keuper.
- HOLCOSPERMUM** Nathorst, 1914.
Holcospermum dubium Nathorst, 1914, p. 28, pl. 15, figs. 53, 54; seed; Carboniferous; Spitzbergen.
- HOLEOSPERMUM**.
 Mistake for *Holcospermum*, in Davies, 1929, p. 117.
- HOLEOPLEURA** Caspary, 1856.
Holeopleura victoria Caspary, 1856, p. 216, pl. 12, figs. 10-22; seeds, Nymphaeaceae; Miocene; Dornheim, Woelfersheim, Hesse.
- HOLOSPORELLA** Pia, 1930.
Holosporella siamensis Pia, 1930, p. 177, pl. 4, figs. 1-6; alga, Dasycladaceae; Kamawkala limestone, Upper Triassic; Thaungyin River, frontier of Burma and Siam, north of Myawadi.
- HOLSTIA** Hagstrom, 1906.
Holstia splendens Hagstrom, 1906, p. 90, pl. 3; Pleistocene; Toppeladugard, Sweden.
- HOMOXYLON** Hartig, 1848.
Homoxylon blasii Hartig, 1848c, p. 188; wood; Upper Cretaceous; Wetterau, Hesse.
- HOMOXYLON** Sahni, 1932.
Homoxylon rajmahalense Sahni, 1932a, p. 1, pls. 1, 2; wood, compared with modern homoxylous Magnoliaceae; Jurassic; Rajmahal Hills, Behar, India.
- HOOLEYA** Reid and Chandler, 1926.
Hooleyia hermis (Unger) Reid and Chandler, 1926, p. 93, pl. 6, figs. 7-9; fruit, Betulaceae; Oligocene; Isle of Wight, England.
- HORMOSPORITES** Gruss, 1927.
Hormosporites devonicus Gruss, 1927, p. 367, fig. 810; alga, Cyanophyceae?; Devonian; Spitzbergen. See also Gruss, 1928b, p. 504, pl. 41, figs. 21, 22.
- HORNEA** Kidston and Lang, 1920.
Hornea lignieri Kidston and Lang, 1920a, p. 611, pls. 4-10; petrified plant, Psilophytales; Old Red Sandstone, Devonian; Muir of Rhyne, Aberdeenshire, Scotland. See *Horneophyton*.
- HORNEOPHYTON** Barghoorn and Darrah, 1938.
Horneophyton lignieri (Kidston and Lang) Barghoorn and Darrah, 1938, p. 142. For *Hornea lignieri* Kidston and Lang, 1920a, p. 611, pls. 4-10.
- HOSTIMELLA**.
 See *Hostinella*.
- HOSTINELLA** Barrande, 1882.
Hostinella hostinensis Barrande, in Stur, 1882, p. 352, pl. 3, figs. 1, 2; pl. 4; branched dichotomizing naked axis, psilophyte; "Etage H-h," Silurian; Hostin, Srbsko, Bohemia.
- HOVENIPHYLLUM** Nathorst, 1888.
Hoveniphyllum thunbergi Nathorst, 1888, p. 232, pl. 30, fig. 6; leaf, compared with *Hovenia dulcis*; Pliocene; Yokohama, Kuragigori, Musashi province, Japan.
- HSIANGCHIPHYLLUM** Sze, 1949.
Hsiangchiphyllum trinerve Sze, 1949, p. 28, pl. 7, fig. 6; pl. 8, fig. 1; Mesozoic; Hsiangchi, China.
- HUMILIS** Roualt, 1850.
Humilis legalli Roualt, 1850, p. 739; Silurian; Guichen, Brittany.
- HUTTONIA** Sternberg, 1837.
Huttonia specata Sternberg, 1837 (1820-38), p. 69, pl. 1; Upper Carboniferous; Radnitz, Bohemia.
- HYDATICA** Artis, 1825.
Hydatica prostrata Artis, 1825, p. 1, pl. 1; Carboniferous; near Wentworth, Yorkshire, England.
- HYDNITES** Meschinelli, 1892.
Hydnites argillae (Ludwig) Meschinelli, in Saccardo, 1892, p. 748. See also Meschinelli, 1898, p. 8, pl. 5, figs. 5-10; fungus, Hymenomycete.
- HYDRANGEIPHYLLUM** Dusen, 1899.
Hydrangeiphyllum affine Dusen, 1899, p. 102; leaf, compared with *Hydrangea scandens* Poeppig; Oligocene; Barancas de Carmen Sylva, Chile.
- HYDROCHARITES** Weber, 1855.
Hydrocharites obcordatus Weber, 1855, p. 129, pl. 30, fig. 2; leaf, Hydrocharideae; Miocene; Rott, Rhenish Prussia.
- HYDROCOTYLOPHYLLUM** Teixeira, 1947.
Hydrocotylophyllum lusitanicum Teixeira, 1947, p. 11, pl. 1, fig. 5; leaf, compared with *Hydrocotyle asiatica*; Wealden; Portugal.
- HYDROCYTIUM** Matthew, 1889.
Hydrocytium silicula Matthew, 1889, p. 146, pl. 6, fig. 2; incertae sedis; Cambrian; Nova Scotia.
- HYDRODICTYOLITES** Elovski, 1930.
Hydrodictyolites carbonis Elovski, 1930, p. 35, pl. 1, fig. 4; Moshchny coal seam, Chernogorski mines, Minusinsk Basin, Siberia.
- HYDRODICTYOPSIS** Massalongo, 1858.
Hydrodictyopsis prisca Massalongo, 1858a, p. 5. See also Massalongo, 1859, p. 93, pl. 2.
- HYDROPTERANGIUM** Halle, 1910.
Hydropterangium marsilioides Halle, 1910, p. 11, pl. 2, figs. 1-14; pl. 3, figs. 12-15; sporocarps? of a water fern; lower Rhætic; Bjuf and Hyllinge, Sweden.
- HYENIA** Nathorst, 1915.
Hyenia sphenophylloides Nathorst, 1915, p. 22, pl. 1, figs. 1-5; pl. 2, fig. 1; pl. 4, figs. 1-3; articulate; Devonian; Norway.

HYGROHYPNIDIUM Kirchheimer, 1936.
Hypgrohypnidium ludwigi Kirchheimer,
1936d, p. 340, figs. 1-4; Tertiary; Salz-
hausen, Germany.

HYLOMITES.

Error for *Xylomites*, in Geinitz, 1925, p.
337

HYMENAEOPHYLLUM Velenovsky, 1889.
Hymenaeophyllum primigenium (Saporta)
Velenovsky, 1889, p. 51.

HYMENOPHYLLEA C. E. Weiss, 1869.
Hymenophyllea subalata (Geinitz) C. E.
Weiss, 1869, p. 57. For *Hymenophyl-
lites alatus* Geinitz, part, see Geinitz,
H. B., 1855, p. 18, pl. 24, fig. 15; pl. 25,
fig. 1.

HYMENOPHYLLITES Goepfert, 1836.
Hymenophyllites quercifolius Goepfert,
1836, p. 252, pl. 14, figs. 1, 2; fernlike
foliage; Carboniferous; Silesia.

HYMENOPTERIS Stokes and Webb, 1824.
Hymenopteris psilotoides Stokes and
Webb, 1824, p. 424, pl. 46, fig. 7; pl. 47,
fig. 2; Wealden; Tilgate Forest, Sussex,
England.

HYMENOPTERITES Stokes and Webb,
1824.

Hymenopterites Stokes and Webb, 1824,
p. 426; nom. nud.

HYMENOTHECA Henry Potonie, 1890.
Hymenotheca beyschlagi Henry Potonie,
1890, p. 23, pl. 3; pteridosperm? micro-
sporangiate organ; Upper Carbonifer-
ous; Saarbrücken.

HYMENOZONOTRILETES Naumova, 1937.
Hymenozonotriletes triangularis Mehta,
1944, p. 129, pl. 1, fig. 1; Paleozoic;
Rewa, India.

HYOSERITES Ettingshausen, 1868.
Hyoerites schultzei Ettingshausen, 1868a,
p. 206, pl. 35, fig. 27; achene, Com-
positae; Miocene; Priesen, Bohemia.

HYPHANTAENIA Ferdinand Roemer, 1880.
Hyphantaenia chemungensis (Vanuxem),
Ferdinand Roemer, 1880, p. 126. For
Uphantania chemungensis Vanuxem,
1842, p. 183, fig. 50.

HYPHITES Reinsch, 1881.
Hyphites sp. Reinsch, 1881, p. 36, pl. 7b,
figs. 5, 8; Lower Silurian; Illinois.

HYPHOPLASMIUM Reinsch, 1881.
Hyphoplasmium sp. Reinsch, 1881, p. 40;
pl. 7b, fig. 8; pl. 8a, figs. 1-8; Upper
Carboniferous; Mittelbexbach, Bavaria.

HYPHOPTERIS Schimper, 1869.
Hyphopteris radiata Schimper, 1869, p.
365.

HYPNITES Ettingshausen, 1853.
Hypnites haeringianus Ettingshausen,
1853, p. 27, pl. 4, fig. 12; moss; Eo-
cene; Haering, Tirol, Austria.

HYPOCHNITES Meschinelli, 1898.
Hypochnites sp. (Conwentz) Meschinelli,
1898, p. 8, pl. 6, figs. 2-5; fungus,
Hymenomycetaceae.

HYPOGLOSSIDIUM Heer, 1874.
Hypoglossidium antiquum Heer, 1874a,
p. 129, pl. 38, fig. 14; leaf, monocotyle-
don; Cretaceous, Greenland.

HYPSILOCARPUS Grand'Eury, 1890.
Hypsilocarpus amygdalaeformis (Goep-
fert and Berger) Grand'Eury, 1890, p.
328, pl. 6, fig. 7; seed, Cordaitales?;
Upper Carboniferous; Gard, France.

HYROCANOPTERIS Kristofowitsch and
Prynada, 1933.

United Geol. Prosp. Service USSR Trans.,
1933, no. 336, p. 10; Filices; Upper
Triassic (not seen). See Gothan, 1942b,
p. 126.

HYSTERITES Goepfert, 1846.
Hysterites opegraphoides Goepfert, 1846
(1841-46), p. 145, pl. 14, figs. 1, 2.
See Goepfert, 1836, p. xxiii; nom. nud.
Meschinelli, 1892, p. 772, erroneously
attributes this to Tode.

HYTHIA Stöpes, 1915.
Hythia elgari Stöpes, 1915, p. 278, pls. 29,
30; wood, incertae sedis; Lower Cre-
taceous (Aptian); Kent, England.

I

ICACINICARYA Reid and Chandler, 1933.
Icacinicarya platycarpa Reid and Chand-
ler, 1933, p. 345, pl. 16, figs. 11-18;
endocarp, Icacinaceae; London Clay,
Eocene; Sheppey, Kent, England.

IDELOPTERIS Zalesky, 1929.
Idelopteris elegans Zalesky, 1929d, p.
721, fig. 1; compared with *Psygmo-
phyllum*; upper Permian; Siberia.

IDIOPHYLLUM Lesquereux, 1880.
Idiophyllum rotundifolium Lesquereux,
1880, p. 160, pl. 23, fig. 11; Carbondale
formation, Pennsylvanian; Mazon
Creek, Ill.

IEGOSIGOPTERIS Zalesky, 1935.
Iegosigopteris yavorskii Zalesky, 1935a, p.
752, pls. 1-3; petrified stem, Osmunda-
ceae; Russia.

ILLICIPHYLLUM Velenovsky, 1889.
Illiciphyllum deletum Velenovsky, 1889,
p. 54. For *Illicium deletum* Velenov-
sky, 1884, p. 51, pl. 3, fig. 5; Upper
Cretaceous; Lipenc, Bohemia.

ILLICITES Mueller, 1877.
Illicites astrocarpa Mueller, 1877 (1877-
79), p. 179; Pliocene; Gulgong, Aus-
tralia. See also Mueller, 1879 (1877-
79), p. 171, pl. 4, figs. 3, 4.

ILLINIOCARPON Schopf, 1938.

Illiniocarpum cadyi Schopf, 1938b, p. 144, pl. 1, figs. 1-3; pl. 2, figs. 11-13, 15; lycopod seedlike organ; coal No. 6, Pennsylvanian; Nashville, Washington County, Ill.

ILLINITES Kosanke, 1950.

Illinites unicus Kosanke, 1950, p. 51, pl. 1, figs. 3, 4; spore; Pennsylvanian; 10-inch coal bed exposed in Coffee Creek, Wabash County, Ill.

ILSAEPHYTUM C. E. Weiss, 1885.

Ilsaephytum kayseri C. E. Weiss, 1885a, p. 178, pl. 6, figs. 1, 2. See also Posthumus, 1931.

IMPARIPTERIS Gothan, 1941.

Palaont. Zeitschr., 1941, Band 22, p. 427 (not seen, cited in Gothan, 1942b, p. 127).

INCOLARIA Herzer, 1893.

Incolaria securiformis Herzer, 1893a, p. 365, pl. 9; fungus?; Carboniferous; Tuscarawas County, Ohio.

INDOPOLIA Pia, 1936.

Indopolia satyavanti Pia, in Rao and Pia, 1936, p. 20; pl. 1, figs. 1, 5-13; pl. 2, fig. 4; alga, Dasycladaceae; Miniyur group, uppermost Cretaceous; Trichinopoly district, southern India.

INDOSTROBUS Sahni, 1931.

Indostrobus bifidolepis Sahni, 1931, p. 80, pl. 13, figs. 54-66; petrified cones, allied to *Pityostrobus*; probably uppermost Cretaceous; probably from Deccan area, India.

INDOTHECA Sitholey, 1943.

Indothea sakesarensis Sitholey, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 174, pl. 8, figs. 27, 28; Triassic; three-quarters of a mile east of Sari Village, Salt Ridge, India.

INGOPHYLLUM Velenovsky, 1889.

Ingophyllum latifolium Velenovsky, 1889, p. 54. For *Inga latifolia* Velenovsky, 1884, p. 55, pl. 20, figs. 6, 7; Upper Cretaceous; Vyserovic, Bohemia.

INIOPTERIS Zalessky, 1934.

Iniopteris sibirica Zalessky, 1934c, p. 760, fig. 20; fern foliage; Permian; Kuznets, Russia.

INOLEPIS Heer, 1874.

Inolepis imbricata Heer, 1874a, p. 72, pl. 16, figs. 12-16; pl. 23, figs. 6-8; coniferous twigs; Cretaceous; Kome, Avkrusak, Greenland.

IRIARTITES E. W. Berry, 1919.

Iriartites tumbezensis E. W. Berry, 1919b, p. 285, pl. 14; leaf, Arecaceae; Miocene; Tumbes, Peru.

IRIDINIUM Wessel, 1855.

Iridinium priscum Wessel, in Wessel and Weber, 1855, p. 129-130; pl. 20, fig. 7; irislike leaf; Miocene; Rott, Rhenish Prussia.

IRIDIUM Heer, 1866.

Iridium groenlandicum Heer, 1866, p. 275; leaf fragment referred to Iridaceae; Miocene; Atanekrdluk, Greenland. See also Heer, 1868, p. 97, pl. 3, figs. 10, 11.

IRIDOPTERIS Arnold, 1940.

Iridopteris eriensis Arnold, 1940, p. 57, figs. 1, 5; Iridopteridineae, intermediate between Psilophytales and ferns; Tully limestone, Middle Devonian; Erie County, N. Y.

IRITES Lesquereux, 1887.

Irites alaskana Lesquereux, 1887, p. 36; leaves, Iridaceae?; Lower Cretaceous; Cape Lisbourne, Alaska. First? illustrated species: *Irites grandifolium* Principi, 1921a, p. 60, pl. 3, fig. 1.

IRRAWADIOXYLON Gupta, 1936.

Irrawadioxylon burmense (Holden) Gupta, 1936, p. 305. For *Dipterocarpozylon burmense* Holden, 1916, p. 271, pl. 29; Miocene (Irrawadian); Burma.

ISATIDES Saporta, 1889.

Isatides microcarpa Saporta, 1889, p. 87, pl. 9, fig. 3; fruit, Cruciferae; Eocene; Aix, Provence, France.

ISIOLOPTERIS Zalessky, 1930.

Isiolopteris serrata Zalessky, 1930f, p. 915, fig. 2; fernlike foliage; Permian; Pechora River basin, 4 km below Ost-Voy, Russia. See Zalessky, 1934b.

ISOETITES Muenster, 1842.

Isoetites crociformis Muenster, 1842 (1839-43), p. 107, pl. 4, fig. 4; Jurassic; Daiting near Manheim, Bavaria.

ISOETOIDES Wethered, 1884.

Isoetoides Wethered, 1884, p. 300; a generic name proposed for spores, compared with *Isoetes*, found in the "Car-mock Chase" coal; the name is "suggested * * * pending further investigations."

ISOETOPSIS Saporta, 1888.

Isoetopsis subaphylla Saporta, 1888, p. 28, pl. 2, figs. 16-20; *Isoetes*-like sporophyll with spores; Eocene; Aix, Provence, France.

ISONANDROPHYLLUM Geyler, 1887.

Isonandrophyllum sp. Geyler, 1887a, p. 498, pl. 33, fig. 9; leaf fragment, Sapotaceae; Eocene; Labuan, Borneo.

ISSELLA Squinabol, 1891.

Isselia primaeva Squinabol, 1891a, p. 779, pl. 16, fig. 5; leaf fragment, monotyledon; lower Miocene; Ste.-Justine, Sassello, France.

ITIERIA Saporta, 1872.

Itieria brongniarti Saporta, 1872a-73, p. 122, pl. 4; alga? Jurassic; Orbagnoux, France.

JUGLANDOXYLON.

Juglandoxylon wichmanni Hofmann, 1884b, p. 36; probably mistake for *Juglandoxylon*.

- IVANOVIA** Khvorova, 1946.
Ivanovia tenuissima Khvorova, 1946, p. 737, 2 figs; alga; middle Carboniferous; Moscow Basin, USSR.
- IXOROPHYLLUM** Geyler, 1887.
Ixorophyllum anceps Geyler, 1887a p. 495,, pl. 35, figs. 1, 2; leaf fragment, Rubiaceae; Eocene; Labuan, Borneo.
- IXOSTROBUS** Raciborski 1891.
Ixostrobus siemiradzskii Raciborski, 1891a, p. 378. For *Taxites siemiradzskii* Raciborski, 1891b, p. 315, pl. 5, fig. 7; cycadophyte microsporangiate cone?; Rhaetic, Poland. See discussion by Harris, 1935, p. 146-147.
- J**
- JANENSCHIA** Gothan, 1927.
Janenschia obscura Gothan, 1927b, p. 146, pl. 18, figs. 1-5; pl. 19, figs. 11, 12; "Permo-Carboniferous"; Mkumbi, East Africa.
- JEANPAULIA** Unger, 1845.
Jeanpaulia dichotoma (C. F. W. Braun) Unger, 1845 (1841-47), p. li. For *Baiera dichotoma* C. F. W. Braun in Münster 1843 (1839-43); Lower Jurassic (Lias); Hinterholz, Austria. Apparently first illustrated species is *Jeanpaulia munsteriana* (Presl) Schenk, 1865-67, pl. 11, figs. 1-13.
- JEJISOGOPTERIS** Zalessky, 1937.
 Acad. sci. U. S. S. R. Bull. 1937, sér. 7^e, p. 747 (not seen; cited in Gothan, 1942b, p. 127).
- JENKINSELLA** Reid and Chandler, 1933.
Jenkinsella apocynoides Reid and Chandler, 1933, p. 481, pl. 28, figs. 1-5; fruit, Apocynaceae or Asclepiadaceae; London Clay, Eocene; Herne Bay, Kent, England.
- JIDOPTERIS** Koidzumi, 1936.
Jidopteris manchurica (Kawasaki) Koidzumi, 1936, p. 142. For *Pecopteridium manchuricum* Kawasaki, 1931 (1927-31); pl. 34, fig. 73; intermediate between *Pecopteris* and *Callipteridium*; Jido series, Lower Permian; Tayaokou coal mine, Manchuria.
- JIRUSIA** Bayer, 1914.
Jirusia bohémica Bayer, 1914, p. 23, figs. 12, 13; cycadophyte leaves.
- JODOTELLA** Morellet and Morellet, 1913.
Jodotella veslensis Morellet and Morellet, 1913, p. 29, pl. 3, fig. 12; alga, Bornetellées, Eocene (Thanetien), Chalon-sur-Vesles, France.
- JOHANNOPHYTON** Matthew, 1910.
Johannophyton discrepans (Dawson) Matthew, 1910, p. 84, pl. 2, figs. 7-9; pl. 3.
- JOHNSTONIA** Walkom, 1925.
Johnstonia coriacea (Johnston) Walkom, 1925, p. 79, figs. 6-8; fernlike foliage; Mesozoic; Tasmania.
- JONGMANSIA** Reid and Reid, 1915.
Jongmansia cypreaeformis Reid and Reid, 1915, p. 95, pl. 8, figs. 14-21; seeds, Anonaceae; Pliocene; Reuver, Swalmen, Netherlands.
- JORDANIA** Goeppert and Fiedler, 1857.
Jordania bignonioides Goeppert and Fiedler in Fiedler, 1857, p. 289, pl. 28, figs. 36, 37, 43, 44; seed compression; Upper Carboniferous; near Saarbruck, Rhenish Prussia.
- JORDANIA** Schenk, 1880.
Jordania ebenoides Schenk, 1880, p. 659; wood, dicotyledon; Upper Cretaceous; Libyan Desert. See also Schenk, 1883a, p. 10, pl. 4, figs. 13, 14.
- JUGLANDICARYA** Reid and Chandler, 1933.
Juglandicarya lubbocki Reid and Chandler, 1933, p. 140, pl. 3, figs. 1-4; seed, Juglandaceae; London Clay, Eocene; Sheppey, Kent, England.
- JUGLANDINIUM** Unger, 1845.
Juglandinium mediterraneum Unger, 1845, p. 241; Tertiary; Hungary.
- JUGLANDIPHYLLUM** Nathorst, 1888.
Juglandiphyllum sp. Nathorst, 1888, p. 208, pl. 4, fig. 6; leaf, dicotyledon; Tertiary; Japan.
- JUGLANDIPHYLLUM** Fontaine, 1889.
Juglandiphyllum integrifolium Fontaine, 1889, p. 315, pl. 157, figs. 3, 5, 6; leaf compared with *Persea* and *Quercus*; Potomac group, Lower Cretaceous; White House Bluff, Va.
- JUGLANDITES** Sternberg, 1825.
Juglandites nuxtauriniensis (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xl. For *Juglans nuxtauriniensis* Brongniart, 1822, p. 323, pl. 6, fig. 6; *Juglans*-like endocarp; Miocene; Turin, Italy.
- JUGLANDOXYLON** Kraus, 1882.
Juglandoxyylon mediterraneum Kraus, 1882, p. 91; wood; Miocene; Girgenti, Sicily.
- JUGLANSOXYLON** Falqui, 1906.
Juglansoxyylon zuricensis Falqui, 1906, p. 26, pl. 1, fig. 2; lower Miocene. See Edwards, 1931.
- JUGLOXYLON** Stopes and Fujii, 1910.
Jugloxyylon hamaoanum Stopes and Fujii, 1910, p. 62, pl. 7, fig. 48; wood, possible affinities with *Juglans*; Upper Cretaceous; Hokkaido, Japan.
- JUNGERMANNIOPSIS** Howe and Hollick, 1922.
Jungermanniopsis cockerellii Howe and Hollick, 1922, p. 208, fig. 1; leafy liverwort; Miocene; Florissant, Colo.

JUNGERMANNITES Goepfert, 1845.
Jungermannites neesianus Goepfert, in Berendt, 1845, p. 113, pl. 6, figs. 34-37; liverwort?; Miocene; Prussia.

JUNGHUHNITES Goepfert, 1854.
Junghuhnites javanicus Goepfert, 1854, p. 54, pl. 2, figs. 11-16; wood, incertae sedis; Tertiary; Java.

JUNIPERITES Brongniart, 1828.
Juniperites alienus (Sternberg) Brongniart, 1828b, p. 108. For *Thuites alienus* Sternberg, 1825 (1820-38), Tentamen, pl. 45, fig. 1.

JUNIPEROXYLON Houlbert, 1910.
Juniperoxyylon turonense Houlbert, 1910, p. 73, pl. 4; coniferous wood; middle Eocene; Touraine, France.

JURANYIA Tuzson, 1908.
Juranyia hemisfollata Tuzson, 1908, p. 1, pl. 1, figs. 1, 2; pl. 2, fig. 3; leaves, seeds, Palmaceae; Upper Cretaceous; Ruszkabanya, Krasso-Szoreny, Hungary. See also Tuzson, 1914, p. 248.

K

KAIDACARPUM Carruthers, 1868.
Kaidacarpum ooliticum Carruthers, 1868, p. 156, pl. 9, figs. 1-6; described as cast of a fruit (Pandanaceae), later transferred to *Araucarites* (Seward, 1919, p. 256); Jurassic (Oolite); Moulton Park Quarries, Kingsthorpe, near Northampton, England.

KAIKOMAKO Hector, 1880.
Kaikomako penantioides Hector, 1880, p. 49; nom. nud.

KAIKORAIA W. R. B. Oliver, 1936.
Kaikoraia gracilis W. R. B. Oliver, 1936, p. 301, fig. 21; leaf, Sapotaceae; Pliocene; Kaikorai Valley, Otago, New Zealand.

KALINAIA Bayer, 1914.
Kailinaia dekapetala Bayer, 1914, p. 51; Cretaceous; Vyserovic, Bohemia.

KALOXYLON Williamson, 1875.
Kaloxylon hookeri Williamson, 1875, p. 453; roots of *Lyginopteris*; Upper Carboniferous; Oldham, England. See also Williamson, 1876a, p. 23, pl. 5, figs. 23-27; pl. 4, fig. 29; pl. 6, figs. 28, 30-33; pl. 7, figs. 34-38; and Seward, 1917, p. 67.

KALYMMA Unger, 1856.
Kalymma grandis Unger, 1856, p. 157, pl. 1, figs. 4-6; petiole of *Calamopitys*; Upper Devonian; Saalfeld, Thuringia. Name first cited in Unger, 1854; nom. nud. See also Posthumus, 1931.

KAMARASPERMUM Kern, 1946.
Kamaraspermum lecanum Kern, in Kern and Andrews, 1946, p. 296, pl. 19; petrified seed with air chamber, Cardiocarpales?; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

KANTIA Pia, 1912.
Kantia philosophi Pia, 1912, p. 45, pl. 4, figs. 17-21; alga, Siphonaeae Verticillatae; Triassic; Austria?

KARRERIA (Munier-Chalmas) Morellet and Morellet, 1913.
Karrerria zitteli Munier-Chalmas, in Morellet and Morellet, 1913, p. 11, figs. 13-24.

KARSTENIA Goepfert, 1836.
Karstenia omphalostigma Goepfert, 1836, p. 452, pl. 33, fig. 1; fern rhizome, compared with *Polypodium aureum*; Upper Carboniferous; Charlottenbrunn, Silesia.

KATADROMOPTERIS Hartung, 1940.
Katadromopteris boncevi Hartung, 1940, p. 101, pl. 2, figs. 1, 2; pl. 3, figs. 1-4; fernlike foliage; Upper Cretaceous.

KATANGASIA Maslov, 1937.
Katangasia samoilovi Maslov, 1937a, p. 321, pl. 3, figs. 2, 4; rock-building alga; Silurian; Russia.

KAYEOXYLON Chowdhury and Tandan, 1949.
Kayeoxyylon assamicum Chowdhury and Tandan, 1949, p. 59, pls. 5, 6; petrified wood, affinities with *Kayea*, Guttiferae; Upper Miocene; Thailangthu Nadi, Assam, India.

KECKIA Glocker, 1841.
Keckia annulata Glocker, 1841, p. 319, pl. 4, figs. 1, 2; plant?; Cretaceous; Capellenberge, near Kwassitz, Moravia.

KENTITES Bureau, 1896.
Kentites pratecinensis Bureau, 1896, p. 285, Tertiary; Pratecini, Italy.

KERAIAPHYLLUM Frentzen, 1932.
Keraiaphyllum suevicum Frentzen, 1932, p. 83, figs. 2, 3; Rhaetic; Swabia, Nürtingen, Germany.

KIDSTONIA Zeiller, 1897.
Kidstonia heracleensis Zeiller, 1897, p. 209, pl. 6, figs. 3, 4; fertile fernlike foliage, Osmundaceae or Schizaeaceae?; Upper Carboniferous; Zongouldak, Asia Minor.

KILTORKENSIA Thomas Johnson, 1917.
Kiltorkensia devonica Thomas Johnson, 1917, p. 250, pl. 12, figs. 3-5; pl. 13, figs. 1-5; incertae sedis; Upper Devonian; Kiltorcan, County Kilkenny, Ireland.

KINGTHIOPHYLLUM Crie, 1889.
Kingthiophyllum primaevum Crie, 1889a, p. 89; nom. nud.

KINNEYIA Walcott, 1914.

Kinneyia simulans Walcott, 1914, p. 107, pl. 11, fig. 3; alga; Beltian series, Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

KIRCHNERIA Alexander Braun, 1854.

Kirchneria decurrens Alexander Braun, 1854, p. 6, pl. 1, figs. 1-3; Triassic (Keuper); Eckersdorf, B a v a r i a. Earlier citation: Braun, C. F. W., 1840, p. 97; nom. nud.

KIRKORIA Zalesky, 1937.

Kirkoria multifida Zalesky, 1937b, p. 83, figs. 51, 52; ginkgophyte? foliage; Permian; above village of Matveyevo, Ourals, Russia.

KIRSTEA Kirchheimer, 1936.

Kirstea zinkeiseni (Geinitz) Kirchheimer, 1936a, p. 86, pl. 12, figs. 38a-f; seed, Magnoliaceae; Tertiary (Braunkohle); Altenburg, Germany.

KITAKAMIANIA Ishijima, 1943.

Kitakamiania eguchii Ishijima, 1943, p. 639, figs. 1, 2; alga; Cretaceous; Japan.

KLIPPSTEINIA Unger, 1845.

Klippsteinia medullaris Unger, 1845 (1841-47), p. lxxxiii. Illustrated in Unger, 1858a, p. 12, pl. 3, figs. 8-10; Miocene; Thal, Germany.

KLOEDENIA Goepfert, 1839.

Kloedenia quercoides Goepfert, 1839, p. 521, pl. 8b, figs. 1, 3, 4; wood (placed in *Quercinium* by Edwards, 1931); Cretaceous; Silesia.

KLUKIA Raciborski, 1890.

Klukia exilis (Phillips) Raciborski, 1890, p. 6, pl. 1, figs. 17-19; fertile foliage, Schizaeaceae; Jurassic; Yorkshire, England.

KNIGHTIOPHYLLUM Ettingshausen, 1887.

Knightiophyllum primaevum Ettingshausen, 1887b, p. 185, pl. 9, fig. 12; leaf fragment, Proteaceae; Upper Cretaceous; New Zealand.

KNIGHTIOPHYLLUM E. W. Berry, 1916.

Knightiophyllum wilcoxianum E. W. Berry, 1916b, p. 208, pl. 35, figs. 1-3; leaf, Proteaceae; Lagrange formation, lower Eocene; Puryear, Henry County, Tenn.

KNIGHTITES Saporta, 1861.

Knightites salyorum Saporta, in Heer, 1861, p. 145; leaf, Proteaceae; Eocene; Aix, Provence, France. See also Saporta, 1862, p. 254, pl. 9, fig. 1.

KNORRIA Sternberg, 1825.

Knorria imbricata Sternberg, 1825 (1820-38) Tentamen, p. xxxvii, pl. 27; partly decorticated arborescent lycopod stem; Carboniferous. Seward, 1910, p. 124 notes: "Although it is now a well-established fact that fossils bearing the name *Knorria* are imperfect lepidoden-

droid stems, the use of the term may be conveniently retained for descriptive purposes." In such a case a "type species" can have little significance, for the size, anatomical details, and degree of decortication will result in correspondingly different fossils.

KNORRIPTERIS Henry Potonie, 1899.

Knorripteris mariana Henry Potonie, 1899, p. 68, fig. 35; petrified fern stem, Knorripteridaceae; Triassic; Krappitz, Upper Silesia. See also Hörick, in Potonie, Henry, 1910, no. 134, p. 1-19.

KNOWLTONELLA E. W. Berry, 1911.

Knowltonella mazoni E. W. Berry, 1911a, p. 235, pls. 25-27; frond fragments, Matoniaceae?; Patapsco formation, Lower Cretaceous; Stump Neck, near Glymont, Md.; near Widewater, Va.

KOHEKOHE Hector, 1880.

Kohekohe dysoxyloides Hector, 1880, p. 49; nom. nud.

KOHLMANNOPTERIS Richter, 1899.

Kohlmannopteris insignis Richter, 1899, p. 40; nom. nud.

KONINCKOPORA (Lee) Alan Wood, 1943.

Koninckopora inflata (de Koninck) Alan Wood, 1943, p. 208, pls. 8-10; alga, Dasycladaceae; Lower Carboniferous; Visé, Belgium. Previously described by de Koninck, 1842, as a coral, and by Lee, 1912, as a bryozoan.

KORAIA Oishi, 1931.

Koraia koraiensis Oishi, 1931a, figs. 1-3; cupule; Jido series, "Permo-Triassic"; near Heijo, Korea.

KOSMOGYRA Stache, 1839.

Kosmogyras superba Stache, 1839, p. 134, pl. 4, figs. 2a, 2b; oogonium, Characeae; Cretaceous; Divacca, near Trieste, Italy.

KOSMOGYRELLA Stache, 1839.

Kosmogyrrella carinata Stache, 1839, p. 121, pl. 2, fig. 19; oogonium, Characeae; Cretaceous?

KRANNERA Corda, 1866.

Kranneria mirabilis Corda, in Renger, 1866, p. 137, pl. 1, fig. 1; Cretaceous; Kaunic, Bohemia.

KRAUSELIA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 128.

KRYSHTOFOVICHIA Nikitin, 1934.

Acad. sci. U. R. S. S. Bull., tome 7, p. 1079 (not seen, cited in Gothan, 1942b, p. 128).

KÜNSBERGIA Corda, 1847.

Künsbergia primaeva Corda, 1947, p. 16; Carboniferous.

KURRIA Schenk, 1866.

Kurria digitata Schenk, 1866, p. 53.

KURTZIANA Frenguelli, 1942.

Kurtziana cacheutensis Frenguelli, 1942, p. 331, pl. 1; fern frond fragment; Triassic; Argentina.

L

LACCOPTERIS Presl, 1838.

Laccopteris elegans Presl, 1838 in Sternberg (1820-38), p. 115, pl. 32, figs. 8a, 8b; fertile fern pinnules, Matoniaceae; Upper Triassic (Keuper); Steindorf near Bamberg, Bavaria.

LACOEIA Read, 1946.

Lacoeia seriata Read, 1946, p. 18, pl. 1, figs. 1-14; probably pteridosperm microsporangiate organ, compared with *Doleriotheca* and *Potonica*; Forkston coal, Pennsylvanian; Dutch Mtn., Pa.

LACONIELLA Krasser, 1920.

Laconiella sardinica Krasser, 1920, p. 16; cyadophyte; Jurassic (Dogger); Laconi, Sardinia.

LAESTADITES Meschinelli, 1892.

Laestadites nathorstii Meschinelli, in Saccardo, 1892, p. 750. See also Meschinelli, 1898, p. 16, pl. 9, fig. 16; fungus, Pyrenomycete.

LAEVIGATISPORITES Ibrahim, 1933.

Laevigatisporites laevigatus Ibrahim, 1933, p. 17, pl. 6, fig. 46; spore; Carboniferous. See also Bennie and Kidston, 1886, p. 107 (Triletes I), pl. 3, figs. 1a, 1b.

LAEVIGATOSPORITES Ibrahim, 1933.

Laevigatosporites vulgaris Ibrahim, 1933, p. 39, pl. 2, fig. 16; spore; Carboniferous. For *Sporonites vulgaris* Ibrahim, 1932, p. 448, pl. 15, fig. 16.

LAFFONIA Heer, 1877.

Laffonia helvetica Heer, 1877a, p. 178, pl. 56, figs. 28, 29; Eocene; Beggingen, Switzerland.

LAGENELLA Reid and Chandler, 1933.

Lagenella alata Reid and Chandler, 1933, p. 497, pl. 29, figs. 28-34; fruit, incertae sedis; London Clay, Eocene; Minster, Kent, England.

LAGENIASTRUM Renault, 1894.

Lageniastrum macrospora Renault, 1894, p. 170. See also Renault, 1896a, p. 429, figs. 81-84; alga, Coelastraceae; Lower Carboniferous; Combres near Rigny, France.

LAGENICULA (Kidston) Zerndt, 1931.

Lagenicula glabrata Zerndt, 1931, p. 175. For *Triletes glabratus* Zerndt, 1930, pl. 8, figs. 38-41; spore; Carboniferous; Labiaz, Poland. Generic name (*Lagenicula*) originally given by Kidston, in Bennie and Kidston, 1886, p. 114.

LAGENIOPTERIS Renault, 1883.

Lageniopteris obtusiloba Renault, 1883, p. 131, pl. 23, figs. 1-8; petrified pecopterid foliage; Upper Carboniferous.

LAGENOIDEA Reid and Chandler, 1933.

Lagenoidea trilocularis Reid and Chandler, 1933, p. 493, pl. 29, figs. 1-18; fruit, incertae sedis; London Clay, Eocene; Sheppey, Kent, England.

LAGENOPTERIS Jongmans, 1935.

Reference not seen; cited in Gothan, 1942b, p. 129.

LAGENOSPERUM Nathorst, 1914.

Lagenospermum nitidulum (Heer) Nathorst, 1914, p. 30, pl. 15, fig. 59; seed; Carboniferous; Spitzbergen.

LAGENOSTOMA Williamson, 1876.

Lagenostoma ovooides Williamson, 1876a, p. 70; pteridosperm seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 266, pl. 9, figs. 53-59; pl. 10, figs. 60-69, 71, 74-76; pl. 11, figs. 70, 72, 73, 77, 78.

LAGERSTROEMIOXYLON Madler, 1939.

Lagerstroemioxylon durum Madler, 1939, p. 130, pl. 12, figs. 8-10; wood, Lythraceae; Pliocene; Schlusenhammer, near Höchst am Main, Germany.

LAGYNOPHORA Stache, 1880.

Lagynophora liburnica Stache, 1880, p. 198; Paleocene; Divacca near Corgnale, Austria-Hungary.

LAHARPIA Heer, 1859.

Laharpia umbellata Heer, 1859, p. 171, p. 147, figs. 28, 29; infructescence, Juncaginaceae; Miocene; Oeningen, Switzerland.

LAMBERTIPHYLLUM Velenovsky, 1889.

Lambertiphyllum durum Velenovsky, 1889, p. 53. For *Lambertia dura* Velenovsky, 1883, p. 5, pl. 2, fig. 16; Upper Cretaceous; Lidice, Bohemia.

LAMINARIOPSIS Meunier, 1904.

Laminariopsis africana Meunier, 1904, p. 157, 4 figs. [unnumbered]; Devonian?; Tienfala, Africa.

LAMINARITES (Brongniart) Sternberg, 1833.

Laminarites tuberculosus (Brongniart) Sternberg, 1833 (1820-38), p. 35. For *Fucoides tuberculosus* Brongniart, 1828a-38, p. 54, pl. 7, fig. 5; alga; Cretaceous; Isle of Aix, near La Rochelle, France.

LAMINOPSIS Fucini, 1938.

Reference not seen; cited in Gothan, 1942b, p. 129.

LAMPETIA Koenig, 1825.

Lampetia lucrymabunda Koenig, 1825, p. 2, pl. 2, fig. 23; fruit, referred to Terebinthaceae; Oligocene; Prussia.

LAMPROCARPITES Heer, 1882.

Lamprocarpites nitidus Heer, 1882, p. 58, pl. 8, figs. 10, 12-14; fruit, Juncaginaceae; Upper Cretaceous; Uperivik, Greenland.

LANFRANCIA Reid and Chandler, 1933.

Lanfrancia subglobosa Reid and Chandler, 1933, p. 457, pl. 25, figs. 37-40; fruit, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

LANGTONIA Reid and Chandler, 1933.

Longtonia bisulcata Reid and Chandler, 1933, p. 453, pl. 25, figs. 18-27; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

LARICITES Goeppert, 1850.

Laricites woodwardii Goeppert, 1850, p. 210; for illustrations, see Lindley and Hutton, 1837 (1831-37), pl. 226, figs. B1, B2; Quarternary; Pastor Hill, Norfolk Cliffs, England.

LARICOIDITES Robert Potonie, 1950.

Laricoidites magnus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 48, pl. C, figs. 9, 10; pollen, compared with *Larix*; lower Miocene; Niederlausitz, Germany.

LARICOPSIS Fontaine, 1889.

Laricopsis longifolia Fontaine, 1889, p. 233, pls. 102, 103, 165, 168; coniferous twigs compared with *Larix*; Potomac group, Lower Cretaceous; Dutch Gap Canal, Va.

LARVARIA Defrance, 1822.

Larvaria reticulata Defrance, 1822, p. 287; plant? middle Eocene; near Paris, France. See also Morellet and Morellet, 1913, p. 14, pl. 14.

LASKOVSKIA Zalesky, 1939.

Laskovskia flabellata Zalesky, 1939b, p. 357, fig. 35; compared with *Callipteris*; Permian; Matveyevo, Kroutaia Katouchka, USSR.

LATANITES Massalongo, 1858.

Latanites parisiensis (Brongniart) Massalongo, 1858, p. 11. For *Palmacites parisiensis* Brongniart, 1822, p. 312, pl. 16, fig. 1. See also Massalongo, 1859, p. 124, pl. 2, fig. 19.

LAURINASTRUM Unger, 1862.

Laurinastrium dubium Unger, 1862, p. 163, fig. 17; leaf, Lauraceae; Eocene; Kuml, Greece.

LAURINIUM Unger, 1845.

Laurinium xyloides Unger, 1845, p. 228; wood; Pliocene; Vicentino, Italy. See also Edwards, 1931.

LAURINOXYLON Felix, 1883.

Laurinoxylon diluviale (Unger) Felix, 1883a, p. 59, pl. 2, figs. 1, 3; pl. 3, fig. 1; wood, dicotyledon; Miocene; Medgyazo, Hungary.

LAURIPHYLLUM Nathorst, 1888.

Lauriphyllum gaudini Nathorst, 1888, p. 203, pl. 2, fig. 6; leaf, dicotyledon; Tertiary?; Shimohinokinamura, Ugo province, Japan.

LAUROCARYX Reid and Chandler, 1933.

Laurocaryx globularis Reid and Chandler, 1933, p. 219, pl. 7, figs. 12-15; fruit, Lauraceae; London Clay, Eocene; Sheppey, Kent, England.

LAUROCARPUM Reid and Chandler, 1933.

Laurocarpum sheppeyense Reid and Chandler, 1933, p. 225, pl. 7, figs. 27, 28; endocarp, Lauraceae; London Clay, Eocene; Minster, Kent, England.

LAUROGENE Ettingshausen, 1854.

Laurogene cretacea Ettingshausen, in Reuss, 1854, p. 740.

LAUROPHYLLUM Goeppert, 1857.

Laurophyllum beilschmiedii Goeppert, 1857, p. 45, pl. 10, fig. 65a; pl. 11, figs. 66, 68; leaf, Lauraceae; Eocene; Java.

LAUROXYLON Meschinelli and Squinabol, 1893.

Lauroxylon xyloides (Unger) Meschinelli and Squinabol, 1893, p. 303. For *Laurinium xyloides* Unger, 1845 (1841-47), p. 81.

LEBACHIA Florin, 1938.

Lebachia piniformis (Schlotheim) Florin, 1938, p. 25, pls. 1, 2, 25, 26, 27, 28, 39, 40; coniferous foliage and cones; Permian.

LEBEPHYLLUM W. J. Wilson, 1913.

Lebephyllum reineckeii W. J. Wilson, 1913, p. 88, pl. 9, figs. 1, 2; dicotyledonous leaf compared with *Pilea* and *Urtica*; Miocene?; British Columbia.

LECKENBYA Seward, 1894.

Leckenbya valdensis Seward, 1894b, p. 384. For *Nathorstia valdensis* Seward, 1894, p. 145, pl. 7, fig. 5; pl. 9, fig. 2; fern foliage; Wealden; England.

LECROSIA Florin, 1940.

Lecrosia grand'euryi Florin, 1940b, p. 315, pls. 161-162; seed-bearing cone, Coniferales; Upper Stephanien, Carboniferous; Le Cros near St.-Etienne, France. Generic name cited earlier in Florin, 1927, p. 2; and Florin, 1929b, p. 403.

LECYTHIDOANTHUS E. W. Berry, 1924.

Lecythidoanthus kugleri E. W. Berry, 1924c, p. 103, figs. 1, 2; flower, Lecythidaceae; Miocene; Trinidad, British West Indies.

LECYTHIDOPHYLLUM E. W. Berry, 1923.

Lecythidophyllum courataroides E. W. Berry, 1923, p. 21, pl. 6, figs. 3, 4; leaf, Lecythidaceae; Miocene; Palomares, Oaxaca, Mexico.

LECYTHIOXYLON Milanez, 1935.

Lecythioxylon brasiliense Milanez, 1935, p. 88, pls. 1-3; wood, dicotyledon; Upper Cretaceous, Brazil.

LEGUMINOCARPON Goeppert, 1855.

Leguminocarpum arachnoides Goeppert, 1855, p. 40, pl. 26, fig. 11; fruit, Leguminosae; Miocene; Schossnitz, Silesia. Goeppert also uses the spelling *Leguminocarpos*.

LEGUMINOCARPUM Dotzler, 1938.

Leguminocarpum anceps (Berry) Dotzler, 1938, p. 41, pl. 5, figs. 4, 5; fruit, Leguminosae; Eocene. This spelling of generic name also used by Massalongo, 1859b, p. 121, for *Leguminocarpum* of Goeppert.

LEGUMINOSITES Bowerbank, 1840.

Leguminosites subovatus Bowerbank, 1840, p. 125, pl. 17, figs. 1, 2; seed, Leguminosae; Eocene; Sheppey, Kent, England.

LEGUMINOXYLON Gupta, 1936.

Leguminoxylon burmense Gupta, 1936, p. 305; wood, Leguminosae; Burma.

LEIODERMARIA (Goldenberg) Renault, 1896.

Leioderma lepidodendrifolia (Brongniart) Renault, 1896a, p. 208, pl. 36, fig. 1; lycopod bark impression; Carboniferous; France.

LEJEUNITES Sadebeck, 1886?

Lejeunites dentifolius Sadebeck, 1886, p. 121; moss; Tertiary; Prussia; nom. nud.

LEMANIDIUM Massalongo, 1859.

Lemanidium galazacera Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Corallinites galazacera* Massalongo, 1856, p. 42, pl. 6, figs. 1, 2.

LEMOINELLA Morellet and Morellet, 1913.

Lemoinella geometrica Morellet and Morellet, 1913, p. 24, pl. 1, figs. 54, 55; alga, Dasycladaceae; Eocene; Grignon, France.

LENNEA Kräusel and Weyland, 1932.

Lennea schmidti Kräusel and Weyland, 1932, p. 189; Devonian; Rönkhausen, Westphalia, Germany.

LENZITITES Meschinelli, 1892.

Lenzitites gastaldii (Heer) Meschinelli, 1892, p. 745. For *Lenzites gastaldii* Heer, in Sismonda, 1859, p. 533, pl. 1, figs. 1, 2; middle Miocene; Turin, Italy.

LEPACYCLOTES Emmons, 1856.

Lepacyclotes circularis Emmons, 1856, p. 332, pl. 3, fig. 4; incertae sedis; Triassic; Ellingtons, N. C.

LEPEOCAULUS Zalesky, 1933.

Lepeocaulus aphyllus Zalesky, 1933c, p. 1389, fig. 3; lycopod stem impression; Devonian; Novala Zemlia, Russia.

LEPIDANTHIUM Schimper, 1870.

Lepidanthium micrirhombeum Schimper, 1870 (1869-74), p. 200, pl. 72, fig. 24; cycadophyte microsporangiate cone?; Rhaetic; Veitlahm, near Culmbach, Franconia.

LEPIDIOPSIS Bleicher and Fliche, 1889.

Lepidopsis tufacca Bleicher and Fliche, 1889, p. 579, fig. 1; silique? compared with *Lepidium salivum*; Quarternary; France.

LEPIDOCALAMUS Matthew, 1906.

Lepidocalamus scutiger (Dawson) Matthew, 1906b, p. 117, pl. 4, figs. 1-9; articulate stem; Little River group, Devonian; New Brunswick, Canada.

LEPIDOCARPON Scott, 1900.

Lepidocarpum lomari Scott, 1900, p. 309; lycopod seed cone; Ganister beds, Lower Coal Measures, Upper Carboniferous; Hough Hill, Stalybridge, Oldham, England. See also Scott, 1901, p. 294, pls. 33-41; and Schopf, 1941b.

LEPIDOCARPUS Rothpletz, 1880.

Lepidocarpus ellipsoideus (Goeppert) Rothpletz, 1880, p. 29, pl. 2, fig. 9. For *Trigonocarpum ellipsoideum* Goeppert, 1852; seeds? of doubtful affinity; Carboniferous (Culm); Hainichen, Ottendorf and Lerchenberg, Germany.

LEPIDOCARYOPSIS Stur, 1873.

Lepidocaryopsis westphaleni Stur, 1873, p. 3; Cretaceous; Kaunitz, Bohemia. Only? other species: *Lepidocaryopsis rolloti* Berry, 1929d, p. 3, pl. 1, fig. 7; Guaduas formation, Tertiary; Colombia.

LEPIDOCARYTES Kuntze, 1904.

Lepidocarytes, Kuntze, in Post and Kuntze, 1904, p. 323.

LEPIDOCLADUS Vaffier, 1901.

Lepidocladus fuisseensis Vaffier, 1901, p. 134, pl. 10, figs. 1a-c; lycopod stem with leaves; Lower Carboniferous; Maconnais, France.

LEPIDOCYSTIS Lesquereux, 1880.

Lepidocystis pectinatus Lesquereux, 1880, p. 454, pl. 59, fig. 3; *Lepidocarpaceae*?; Pennsylvanian; near Pittston, Pa.

LEPIDODENDRITES Fliche, 1905.

Lepidodendrites tessellata (Schimper and Mougeot) Fliche, 1905a, p. 144. For *Caulopteris tessellata* Schimper and Mougeot, 1844, p. 64, pl. 29; incertae sedis; Triassic; Ruau, Vosges, France.

LEPIDODENDRON Sternberg, 1820.

Lepidodendron dichotomum Sternberg, 1820 (1820-38), p. 23, pls. 1-3; Upper Carboniferous; Swina, Bohemia. It seems likely that the figures shown on plates 1-3 represent several species; although the second species is the first one described, it would seem that it will serve as a more useful type: *Lepidodendron obovatum* Sternberg, 1820 (1820-38), p. 23, pl. 6, fig. 2; pl. 8, fig. 1.

LEPIDODENDROPSIS Lutz, 1933.

Lepidodendropsis hirmeri Lutz, 1933, p. 118, pl. 15, figs. 1-12; pl. 16, figs. 1-10; lycopod stem impression; Carboniferous (Culm); Germany.

LEPIDOFLOYOS Sternberg, 1825.

Lepidofloyos laricinum Sternberg, 1825 (1820-38), Tentamen, p. xiii, pl. 23, figs. 2-4; arborescent lycopod stem impression with horizontally elongate leaf cushions; Carboniferous; Radnitz and Swina, Bohemia. This is original spelling although most modern workers have adopted *Lepidophloios*.

LEPIDOLEPIS Sternberg, 1823.

Lepidolepis imbricata Sternberg, 1823 (1820-38), p. 39, pl. 27; partly decorticated arborescent lycopod stem.

LEPIDOPHLOIOS.

See note under *Lepidofloyos*. See also Sterzel, 1907, p. 728; he divides the genus into *Eulepidophloios* and *Sublepidophloios*.

LEPIDOPHYLLUM Brongniart, 1828.

Of the species listed by Brongniart, 1828b, the following seems to be the only acceptable one: *Lepidophyllum lineare* Brongniart, 1828b, p. 87. For *Poacites carinata* Brongniart, 1822, p. 238, pl. 3, fig. 2; a long linear leaf; Carboniferous. Notes on Brongniart's other species may be of interest because of the need of a revision of this genus: *L. majus* Brongniart, a lycopod cone scale which would fall in *Lepidostrobophyllum*, Hirmer, 1927, p. 231. *L. lanceolatum* Brongniart, apparently never described by Brongniart; see Riehl, 1869, p. 141, pl. 28, fig. 10; also a *Lepidostrobophyllum*. *L. boblayi* Brongniart, nom. nud. *L. trinerve* Brongniart, nom. nud.? Lindley and Hutton describe a species under this name which may be Brongniart's; also a *Lepidostrobophyllum*. Note also that *Lepidophyllum* is pre-empted by Cassini for a living Compositae. See Cassini in Sci. soc. Philomatique Bull. 1816, p. 198-200, Paris.

LEPIDOPTERIS Schimper, 1869.

Lepidopteris stuttgartiensis (Jaeger) Schimper, 1869 (1869-74), p. 572, pl. 34; fernlike foliage; Upper Triassic (Keuper); near Stuttgart. For description of seed-bearing organs, see Thomas, 1933, p. 250; Harris, 1932a, p. 58.

LEPIDOSIGILLARIA Kräusel and Weyland, 1949.

Lepidosigillaria whitei Kräusel and Weyland, 1949, p. 148; for several fossils previously assigned to *Archaeosigillaria* and *Protolepidodendron*; Upper Devonian.

LEPIDOSTROBOPHYLLUM Hirmer, 1927.

Lepidostrobophyllum maius (Brongniart) Hirmer, 1927, p. 193, 231, fig. 213; isolated lycopod sporophyll; Upper Carboniferous; England.

LEPIDOSTROBUS Brongniart, 1828.

Lepidostrobus ornatus Brongniart, 1828b, p. 87. See also Lindley and Hutton, 1832 (1831-37), p. 81, pl. 26; lycopod cone (possibly *Lepidocarpon*); Carboniferous; England.

LEPIDOTRUNCUS Fritsch, 1908.

Lepidotruncus fortis Fritsch, 1908, p. 23, pl. 7, figs. 1, 2; Silurian; Chodoun, Bohemia.

LEPIDOXYLON Lesquereux, 1878.

Lepidoxyylon anomalum (Brongniart) Lesquereux, 1878b, p. 334. See also Lesquereux, 1879, pl. 83, fig. 5; pl. 84, fig. 1; cordaitan stem impression with leaves attached; Pennsylvanian; Missouri.

LEPROPHRAGMIUM Reinsch, 1881.

Leprophragmium sp. Reinsch, 1881, p. 118, pl. 52, figs. 1-8; pl. 52a, figs. 8-10; Upper Carboniferous; Zwickau, Saxony.

LEPROSPERMUM Heer, 1877.

Leprospermum thurmanni Heer, 1877a, p. 133, pl. 56, figs. 14, 15; seed, Cycadaceae?; Jurassic; Delsberg, Switzerland.

LEPTOCARYUM Brongniart, 1874.

Leptocaryum avellanum Brongniart, 1874, p. 248, pl. 21, fig. 17; silicified seed; Carboniferous; St.-Étienne, France.

LEPTOLITHOPHYLLUM Airoidi, 1930.

Leptolithophyllum roveretoi Airoidi, 1930, p. 684; alga, Corallinaceae; Oligocene; Sassello, Liguria, Italy.

LEPTONEMA John Smith, 1896.

Leptonema tenuis John Smith, 1896, p. 321, pl. 7, fig. 9; incertae sedis; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.

LEPTOPHLOEUM Dawson, 1862.

Leptophloeum rhombicum Dawson, 1862, p. 316, pl. 12, fig. 8; pl. 17, fig. 53; lycopod stem; Devonian.

LEPTOPHYCUS Fritsch, 1908.

Leptophycus venosus (Barrande) Fritsch, 1908, p. 20, pl. 3, figs. 7-9; Silurian; Drabov, Bohemia.

LEPTOPHYCUS J. H. Johnson, 1940.

Leptophycus gracilis J. H. Johnson, 1940, p. 586, pl. 6, figs. 1-3; pl. 7, fig. 3; blue-green or green calcareous alga; South Fork Salt Creek, Park County, Colo.

LEPTOPLASMIUM Reinsch, 1881.

Leptoplasmium sp. Reinsch, 1881, p. 38, pl. 8b, figs. 1-5; pl. 7c, figs. 7-12; Carboniferous; Mittelbroun, Württemberg.

LEPTOPTEROPHYLLUM Thomas, 1930.

Leptopterophyllum nathorsti (Seward) Thomas, 1930, p. 393, pl. 20, fig. 1; pl. 21; cycadophyte leaf; Jurassic; Yorkshire, England.

LEPTOSPERMITES Schmalhausen, 1883.

Leptospermities spicatus Schmalhausen, 1883, p. 319, pl. 37, figs. 7b, 7c; pl. 38, figs. 8-15; fruit, compared with *Leptospermum*, Myrtaceae; Oligocene; Wolyien, Russia.

LEPTOSPERMOCARPUM Menzel, 1913.

Leptospermocarpum herzogenrothense Menzel, 1913, p. 51, pl. 5, figs. 9-16; capsule, Myrtaceae; Tertiary (Braunkohle); near Herzogenrath, Prussia.

LEPTOSPHERITES Richon, 1885.

Leptosphaerites lemoinii Richon, 1885, p. viii, pl. 32; fungus compared with *Leptosphaeria*; Tertiary; Reims, France. Meschinelli, 1892, p. 751, erroneously attributes this genus to Cesati and De Notarius.

LEPTOSTROBUS Heer, 1876.

Leptostrobus laxiflora Heer, 1876c, p. 72, pl. 13, figs. 10-13; pl. 15, fig. 9b; seed-bearing cones, Taxodiaceae; Jurassic, Siberia.

LEPTOSTROMIUM Reinsch, 1881.

Leptostromium sp. Reinsch, 1881, p. 90, pl. 21, figs. 1-6; pl. 22, figs. 1-6; pl. 22a, figs. 1-7; Permian; Stockholm, Württemberg.

LEPTOTESTA Loubiere, 1929.

Leptotesta grand'euryi Loubiere, 1929, p. 594, pl. 12; silicified seed; Carboniferous; Grand-Croix, France.

LEPTOTHRICHITES Meschinelli, 1898.

Leptothrichites buccalis (Robin and Lebour) Meschinelli, 1898, p. 70; Schizomycete.

LEPTOTHYRIOMYCES Kräusel, 1929.

Leptothyriomyces zonatus Kräusel, 1929, p. 4, pl. 1, figs. 1-3; fungus, Leptostromataceae; Tertiary (Upper Miocene?); Anak Slinsing, South Sumatra.

LEPTOXYLUM Corda, 1845.

Leptoxylum geminum Corda, 1845, p. 21, pl. 15; Upper Carboniferous; Swina, Bohemia.

LESANGEANA (Mougeot) Fliche, 1906?

Lesangeana voltzii (Schimper) Fliche, 1906, p. 164, pl. 13, fig. 3. Earliest citation: *Lesangeana hasselotii* Mougeot, 1851, p. 346; nom. nud. See also *L. remota* Blanckenhorn, 1885, p. 147; and Posthumus, 1931.

LESCURIA Perkins, 1906.

Lescuria attenuata Perkins, 1906, p. 220, pl. 57, figs. 7, 10; Tertiary; Brandon, Vt.

LESCUROPTERIS Schimper, 1869.

Lescuropteris moorii (Lesquereux) Schimper, 1869 (1869-74), p. 465; fern-like foliage; Pennsylvanian; Greensburg, Pa. For *Neuropteris moorii* Lesquereux, in Rogers, 1858, p. 860, pl. 19, fig. 1.

LESLEYA Lesquereux, 1880.

Lesleya grandis Lesquereux, 1880, p. 143, pl. 25, figs. 1-3; *Glossopteris*-like foliage; base of Chester limestone, Pennsylvanian; Pennsylvania.

LEUCADENDRITES Saporta, 1862.

Leucadendrites sextinctus Saporta, 1862, p. 249, pl. 7, fig. 8; leaf, compared with *Leucadendron*; Tertiary; France.

LEUCOSPERMITES Saporta, 1861.

Leucospermities denticulatus Saporta, in Heer, 1861, p. 140; leaf, Proteaceae; Eocene; St. Zacharie, France; nom. nud.

LEVEILLEITES Foerste, 1923.

Leveilleites hartnageli Foerste, 1923, p. 62 pls. 4-11; alga?; Medinan formation. Upper Silurian; southern Ontario.

LEYRIDA Reid and Chandler, 1933.

Leyrida bilocularis Reid and Chandler, 1933, p. 488, pl. 28, figs. 22-32; endocarp, incertae sedis; London Clay, Eocene; Sheppey, Kent, England.

LIANOPHYCUS Herzer, 1902.

Lianophycus polyfrons Herzer, 1902, p. 41, pl. 1; organic remains? Carboniferous; Marietta, Ohio.

LIASOPHYCUS Fliche, 1909.

Liasophycus scythohalioides Fliche, 1909, p. 211, alga; Lower Jurassic (Lias); Rimogne, France.

LIASPERMUM Grandori, 1916.

Liaspermum dissectum (Zigno) Grandori, 1916, p. 108, figs. 2-4 [unnumbered plate]; seed?; Jurassic (Lower Oolite); Zuliana near Rovere di Velo, Italy.

LIBOCDRITES Endlicher, 1847.

Libocedrites salicornioides (Unger) Endlicher, 1847, p. 275. For *Thuites salicornioides* Unger, 1841 (1841-47), p. 11, pl. 2, figs. 1-4, 7; pl. 20, fig. 8; coniferous foliage shoots; Eocene; Radoboj, Croatia.

LICROPHYCUS Billings, 1862.

Licrophycus ottawaensis Billings, 1862, p. 99, fig. 87; alga?; Trenton limestone, Lower Silurian; near Ottawa, Canada.

LILLIA Unger, 1842.

Lillia viticulosa Unger, 1842, p. 178; wood; Tertiary; Rauca, Hungary. See also Corda, 1845, p. 49, pl. 60, figs. 1-3.

LIMNOCARPUS Reid, 1898.

Limnocarpus headonensis (Gardner) Reid, 1898, p. 465, figs. a-d; fruit, compared with *Potamogeton*; Lower Headon beds, Oligocene; Hordle Cliff, Hampshire, England.

LIMNOPHYCUS Kirchheimer, 1930.

Limnophycus paradoxus Kirchheimer, 1930a, p. 589, pl. 35; alga, compared with *Cutleria*, *Dictyota*, etc.; Upper Pliocene; Homberg, Germany.

- LIMNOPHYLLUM** Hosius and Marck, 1880.
Limnophyllum primaevum Hosius and Marck, 1880, p. 183, pl. 38, fig. 153; leaf, Pistaceae?; Upper Cretaceous; Westphalia.
- LINGUIFOLIUM** E. A. N. Arber, 1913.
Linguifolium lillieanum E. A. N. Arber, 1913, p. 346, pl. 7, figs. 1, 4; leaf, resembling *Glossopteris*; Mt. Pots beds, Rhaeto-Jurassic; Mount Pots, Ashburton County, New Zealand.
- LINOPORELLA** Steinmann, 1899.
Linoporella capriotica (Oppenheim) Steinmann, 1899, p. 149, fig. 13; alga, Dasycladaceae; Upper Jurassic; Capri.
- LINOPTERIS** Presl, 1838.
Linopteris gutbieriana Presl, in Sternberg, 1838 (1820-38), p. 167. For *Dictyopteris brongniarti* Gutbier, 1835, p. 63. pl. 11, figs. 7, 9, 10; neuropterid-shaped pinnules with net venation; Carboniferous; Zwickau, Saxony.
- LINOSPOROIDEA** Keller, 1895.
Linosporoidea populi Keller, 1895, p. 3, pl. 2, fig. 6; fungus; Miocene; Herisau, Switzerland.
- LIQUIDAMBAROXYLON** Felix, 1884.
Liquidambaroxylon speciosum Felix, 1884, p. 24, pl. 3, figs. 2-4; pl. 4, fig. 4; wood compared with *Liquidambar styraciflua*; Tertiary; Medgyanzo, Hungary.
- LIRIODENDROPSIS** Newberry, 1895.
Liriodendropsis simplex Newberry, 1895, p. 83, pl. 19, figs. 2, 3; pl. 53, figs. 1-4. 7; leaf, Magnoliaceae; Amboy clay, Cretaceous; Woodbridge, N. J.
- LIRIOPHYLLUM** Lesquereux, 1878.
Liriophyllum beekwithii Lesquereux, 1878c, p. 482; leaf, affinities with *Liriodendron*; Cretaceous. See also Lesquereux, 1883, p. 76, pl. 10, fig. 1.
- LISTRODIUM** Zalesky, 1937.
Listrodium uninervium Zalesky, 1937b, p. 83, fig. 50; leaf fragment, incertae sedis; Permian; left bank Sylva River near mouth of Tchekarda River, Ourals, Russia.
- LISTROPHYLLUM** Zalesky, 1934?
Listrophyllyum uscatense Zalesky, 1934c, p. 771, fig. 35; fern pinnule; Permian; Kuznets Basin, Russia.
- LITHARCHAEOCYSTIS** Deflandre, 1932.
Litharchaeocystis costata Deflandre, 1932, p. 1273, figs. 1, 2; alga, Chrysophyceae; Kuznets Basin, Russia.
- LITHIOTIS** Gümbel, 1871.
Lithiotis problematica Gümbel, 1871, p. 48, pl. 2, figs. 13, 14; Lower Jurassic (Liassic); near Roveredo, Italy.
- LITHOBRYON** Ruprecht, 1866.
Lithobryon calcareum Ruprecht, 1866, p. 37; Jurassic; Wjatka, Russia.
- LITHOCAULON** Meneghini, 1857.
Lithocaulon minius Meneghini, 1857, p. 550, pl. H, fig. 7; alga; Tertiary; Sardinia.
- LITHODICTUON** Conrad, 1837.
Lithodictyon beekii Conrad, 1837, p. 167; Silurian (Medina sandstone); Medina, N. Y.
- LITHOMYXA** Howe, 1932.
Lithomyxa calcigena Howe, 1932a, p. 63, pls. 19-23; lime-secreting alga; Recent; Furnace Creek near Harpers Ferry, W. Va.
- LITHOPHYLLODENDRON** Musper, 1919.
Lithophyllo dendron rubrum Musper, 1919, p. 17, figs. 1-12; "Upper White Jura"; Schwaben, Württemberg.
- LITHOSPERMITES** E. W. Berry, 1929.
Lithospermities glabrum E. W. Berry, 1929b, p. 165, pl. 3, figs. 9-13; fruit, Boraginaceae; Tertiary; Belen, Peru.
- LITHOSTACHYS** Fischer-Ooster, 1858.
Lithostachys alpina Fischer-Ooster, 1858, p. 59, pl. 3, fig. 1; alga?; Jurassic (Lower Oolite); near Blumenstein, Switzerland.
- LITHOTHAMNISUM** (Rothpletz) Heydrich, 1900.
Lithothamniscum nahaense Heydrich, 1900b, fig. 1, pl. 7, figs. 1, 2. Generic name cited in Rothpletz, 1891, p. 311.
- LITHOTHAMNITES** Saporta, 1882?
Lithothamnites croizieri Saporta, 1882, p. 21, pl. 1, fig. 6; alga; Jurassic (Oolite); La Rochefoucauld, France.
- LITHOXYLON** Jaeger, 1827.
Lithoxylon arenaceum Jaeger, 1827, p. 38, pl. 5, fig. 4; stem impression, incertae sedis; Upper Triassic (Keuper); Stuttgart.
- LITSAEOPHYLLUM** Deane, 1902.
Litsacophyllum wingellense Deane, 1902a, p. 64, pl. 17, fig. 4; leaf, compared with *Litsea dealbata* Nees (Lauraceae); Tertiary; Wingello, New South Wales.
- LITSEOPSIS** Weyland, 1938.
Litseopsis rottensis Weyland, 1938b, p. 141, pl. 19, fig. 1; staminate flower, Lauraceae; Tertiary; Rott, Siebengebirge, Germany.
- LIVERSIDGEA** Mueller, 1877.
Liversidgea oxyspora Mueller, 1877a, p. 239, figs. 1-5; Pliocene; Richmond River, New South Wales.
- LOBATANNULARIA** Kawasaki, 1927.
Lobatannularia inequifolia (Tokunaga) Kawasaki, 1927 (1927-34), p. 12, pl. 3A, figs. D, E; pl. 4, figs. 13-15; pl. 5, figs. 16-22; pl. 9, fig. 38; pl. 14, figs. 74, 75; foliage, intermediate between *Annularia* and *Schizoneura*; Jido series, "Permian-Carboniferous"; Chöngsön, Korea.

- LOBATICARPUM** Reid and Chandler, 1933.
Lobaticarpum variabile Reid and Chandler, 1933, p. 314, pl. 14, figs. 16-20; fruit, Anacardiaceae?; London Clay, Eocene; Sheppey, Kent, England.
- LOCHMOPHYCUS** Debey and Ettlingshausen, 1859.
Lochmophycus caulerpoides Debey and Ettlingshausen, 1859a, p. 198, pl. 2, figs. 1-5; alga?; Cretaceous; Aachen, Rhinish Prussia.
- LOCKEIA** U. P. James, 1879.
Lockeia siliquaria U. P. James, 1879, p. 17. See James, J. F., 1885, p. 161, pl. 9, fig. 7; Lower Silurian; Kentucky.
- LOGANIA** Stolley, 1925.
Logania canadensis Stolley, 1925, p. 63; Devonian; Campbellton, New Brunswick, Canada.
- LOMARITES** Hector, 1886.
Lomarites pectinata Hector, 1886, p. 66, fig. 30A; Jurassic; Mataura Falls, New Zealand. Cited originally in Hector, 1878, p. 8; nom. nud.
- LOMATITES** Saporta, 1862.
Lomatites acerosus Saporta, 1862, p. 253; leaf, compared with *Hakea repanda* and *Lomatia longifolia* (Proteaceae); Oligocene; Aix, Provence, France. See also Saporta, 1873a, p. 52, pl. 9, fig. 20.
- LOMATOFLOYOS** Corda, 1838.
Lomatofloyos crassicaule Corda, 1838, in Sternberg (1820-38), p. 206, pl. 66, figs. 10-14; pl. 68, fig. 20; arborescent lycopod stem; Carboniferous; Radnitz, Bohemia. Various spelled in later works as *Lomatophloios* and *Lomatophloyos*.
- LOMATOPHLOIOS.**
See *Lomatofloyos*.
- LOMATOPHLOYOS.**
See *Lomatofloyos*.
- LOMATOPTERIS** Schimper, 1869.
Lomatopteris jurensis (Kurr) Schimper, 1869 (1869-74), p. 472, pl. 45, figs. 2-5; fernlike foliage; Upper Carboniferous; Nussplingen, Württemberg.
- LOMENTARITES** Fliche, 1905.
Lomentarites bornetti Fliche, 1905, p. 57, pl. 4, fig. 4; pl. 5, fig. 2b; alga, Rhodophyceae?; Triassic; Meurthe-et-Moselle, France. Generic name given in Fliche, 1903, p. 828.
- LONGCHOPTERIS** Brongniart, 1836.
Lonchopteris bricii Brongniart, 1836 (1828a-38), p. 368, pl. 131, figs. 2, 3. First citation: Brongniart, 1828b, p. 60; nom. nud.
- LOPERIA** Newberry, 1888.
Loperia simplex Newberry, 1888, p. 93, pl. 25, figs. 1-3; incertae sedis; Triassic; Durham, Conn. This binomial cited by Newberry, 1887, p. 126; nom. nud.
- LOPHIODENDRON** Zalesky, 1936.
Lophiodendron tyrganense Zalesky, 1936a, p. 228, fig. 11; lycopod leaf bases; Carboniferous; Russia.
- LOPHODERMA** Zalesky, 1937.
Lophoderma sibirica Zalesky, 1937c, p. 126, fig. 2; lycopod leaf base impression; Permian; Kuznets Basin, Russia.
- LORANTHACITES** Conwentz, 1886.
Loranthacites succineus Conwentz, 1886, p. 135, pl. 13, figs. 6, 7; stem fragment, in amber, Lorantheaceae; early Tertiary; West Prussia.
- LORANTHOPHYLLUM** Unger, 1864.
Loranthophyllum griselinia Unger, 1864, p. 8, fig. 13; leaf, Lorantheaceae?; Tertiary; Manganui, New Zealand.
- LOXOPTERIS** Pomel, 1846.
Loxopteri adiontoides Pomel, 1846, p. 652; fern foliage; Lower Jurassic (Lias); Moselle, France.
- LUDOVIOPSIS** Saporta, 1868.
Ludoviopsis discerpta Saporta, 1868, p. 338, pl. 4, fig. 3; leaf fragment, Pandanaceae; Eocene; Sézanne, France.
- LUHEOPSIS** Langeron, 1900.
Luheopsis dissymetra Langeron, 1900, p. 343, pl. 1, fig. 5; pl. 2, fig. 5; leaf, compared with *Luhea*; Eocene; Sézanne, France.
- LUNZIA** Krasser, 1918.
Lunzia austriaca Krasser, 1918, p. 492, pl. 1, figs. 1-3; pl. 2, figs. 1-4; pl. 3; pl. 4, figs. 2-4; cycadophyte microsporophyll; Triassic; Pramelsreith near Lunz, Austria.
- LYCHNOPHORITES** Martius, 1822.
Lychnophorites dichotomus (Sternberg) Martius, 1822, p. 144. For *Lepidodendron dichotomum* Sternberg, 1820 (1820-38), p. 23, pls. 1-3; pl. 63, fig. 1; Upper Carboniferous; Swina, Bohemia.
- LYCOPODIOLITES.**
See *Lycopodiolithes*.
- LYCOPODIOLITHES** Schlotheim, 1820.
Lycopodiolithes arboreus Schlotheim, 1820, p. 413, pl. 22, fig. 2; lycopod branchlets with foliage; Upper Carboniferous; Waldenburg, Silesia. Sternberg, 1825 (1820-38), Tentamen, p. ix, adopts spelling *Lycopodiolithes*.
- LYCOPODIOPSIS** Renault, 1890.
Lycopodiopsis derbyi Renault, 1890, p. 809; lycopod stem; Permian; San Paulo, Piracicaba, Brazil. See also White, David, 1908, p. 437, pl. 5, fig. 11.
- LYCOPODITES** Brongniart, 1822.
Lycopodites taxiformis Brongniart, 1822, p. 231, pl. 13, fig. 1. This is the first species described by Brongniart, but, according to Seward, it is a conifer. See discussion by Seward, 1910, p. 76.

LYCOPOGENIA Read, 1936.

Lycopogenia callicyrtia Read, 1936b, p. 227, figs. 1, 2; petrified stem, Lepidodendrales; Devonian; near Junction City, Boyle County, Ky.

LYCOSPORA Schopf, Wilson, and Bental, 1944.

Lycospora micropapillata (Wilson and Coe) Schopf, Wilson, and Bental, 1944, p. 54. For *Cirratriadites micropapillatus* L. R. Wilson and Coe, 1940, p. 184, fig. 6; spore; Des Moines group, Pennsylvanian; Iowa.

LYCOSTROBUS Nathorst, 1908.

Lycostrobus scottii Nathorst, 1908b, p. 8, pl. 1; lycopod cone.

LYCOXYLON Srivastava, 1946.

Lycoxylon indicum Srivastava, 1946, p. 192, pl. 1; petrified *Lycopodium*-like stele; Jurassic; Santal Pargana District, Behar, India. Brief description given earlier in Srivastava, 1937, p. 273.

LYGINODENDRON Gourlie, 1843.

Lyginodendron landsburgii Gourlie, 1843, p. 108, pl. 2; stem cast of arborescent lycopod?; Carboniferous; Stevenston, Ayrshire, Scotland.

LYGINOPTERIS Henry Potonie, 1899.

Lyginopteris oldhamiana (Binney) Henry Potonie, 1899, p. 170; pteridosperm stem; Upper Carboniferous; England. For *Dadoxylon oldhamium* Binney, 1866, p. 115. According to Seward, 1917, p. 39, Binney's specimen was first figured by Arber, E. A. N., 1902. See also Williamson, 1873, p. 377; Seward, 1917, p. 38; Walton, 1940; and Jongmans, 1930.

LYGINORACHIS Kidston, 1923.

Lyginorachis papilio Kidston, in Scott, 1923, p. 57; pteridosperm petiole; Cementstone group, Calciferous Sandstone series, Lower Carboniferous; Northam Bridge, Tweed, Scotland. See Crookall, 1931, p. 27, pl. 1, fig. 2; pl. 2, figs. 4, 5; pl. 3, figs. 6-8.

LYGODITES Schulze, 1887.

Lygodites cf. *aneimiifolius* (Debey and Ettingshausen) Schulze, 1887, p. 463. For *Pteridolemma aneimiifolius* Debey and Ettingshausen, 1859, p. 230, pl. 7, fig. 1; fern pinnule; Cretaceous (Senonian); Aachen, Rhenish Prussia.

LYONSIAEPHYLLUM Deane, 1907.

Lyonsiaephyllum duni Deane, 1907, p. 191, pl. 36, fig. 1; leaf, compared with *Lyonsia* and *Alstonia* (Apocynaceae); Tertiary; Warrumburg Mts., New South Wales.

LYSSOXYLON Daugherty, 1941.

Lyssoxylon grigsbyi Daugherty, 1941, p. 71, pls. 26-30; petrified trunk fragment, Williamsoniaceae; upper Triassic; island in Rio Puerco, three-quarters of a mile southeast of Adamana, Ariz.

M

MACCLINTOCKIA Heer, 1866.

Macclintockia dentata Heer, 1866, p. 277. See also Heer, 1868, p. 115, pl. 15, figs. 3, 4; leaf fragment, Proteaceae; Miocene; Atanekderluk, Greenland.

MACRALETHOPTERIS Jongmans and Gothan, 1935.

Jaarb. mijnwezen Nederlandlish-Indië, 1930, Verh., boekdeel 59, p. 130, pl. 40, figs. 2-5; pl. 41, fig. 1, 1935 (not seen). See also Gothan, 1942a, p. 131.

MACROGLOSSOPTERIS Sze, 1931.

Macroglossopteris leiciana Sze, 1931, p. 5, pl. 3, fig. 1; pl. 4, fig. 1; Jurassic; Pinghsiang, Kiangsi province, China.

MACROPORELLA Pia, 1912.

Macroporella dinarica Pia, 1912, p. 33, pl. 2, figs. 1-6; alga, Siphoneae Verticillatae; Triassic; Dalmatia, Austria-Hungary.

MACROPTERYGIUM Schimper, 1870.

Macropterygium bronni (Schenk) Schimper, 1870 (1869-74), p. 132. For *Pterophyllum bronni* Schenk, 1865-76, p. 168, pl. 40, figs. 2, 3; cycadophyte foliage; Carinthia.

MACROSPHENOPTERIS Kidston, 1887.

Macrosphenopteris lindsaeoides Kidston, 1887b, p. 353, pl. 27, fig. 1; sphenopteridlike frond fragment; Upper Carboniferous; Radstock, England.

MACROSPORITES Renault, 1899.

Macrosporites insignis Renault, 1899, p. 1072; spores; Carboniferous; Germany.

MACROCYSTITES Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 131.

MACROSTACHYA Schimper, 1869.

Macrostachya infundibuliformis (Bronn) Schimper, 1869 (1869-74), p. 333, pl. 23, figs. 15-17; articulate cone; Carboniferous; Zwickau, Saxony.

MACROTAENIA Frenguelli, 1943.

Macrotaenia fertilis Frenguelli, 1943b, p. 401, pls. 1-3; fertile fern frond, Marattiaceae; Triassic; Cacheuta, Mendoza, Argentina.

MACROTAENIOPTERIS Schimper, 1869.

Macrotaeniopteris major (Lindley and Hutton) Schimper, 1869 (1869-74), p. 610. For *Taeniopteris major* Lindley and Hutton, 1831-37, p. 31, pl. 92; cycadophyte foliage; Jurassic; Gristhorpe, Yorkshire, England.

MACROTORELLIA Kryshstofovitch, 1927.

Macrotorellia hoshayahiana Kryshstofovitch, 1927, p. 604, pl. 13, figs. 2-9; Cycadophyte leaflets?; Jurassic; North Caucasus.

MAFFEIIA Massalongo, 1857.

Maffeiia ceratophylloides Massalongo, 1857b, p. 777; nom. nud.

- MAGNOLIAEPHYLLUM** (Krasser) Seward, 1926.
Magnoliaephyllum alternans (Heer) Seward, 1926, p. 120, fig. 25; leaf, Magnoliaceae; Cretaceous; Atanikerdluk, Greenland. Generic name cited in Krasser, 1896, p. 131, pl. 17, fig. 12.
- MAGNOLIAESPERMUM** Kirchheimer, 1934.
Magnoliaespermum fliegeli Kirchheimer, 1934a, p. 770, fig. 2; seed, Magnoliaceae; Tertiary; Germany. See also Kirchheimer, 1936a, p. 45, pl. 2, figs. 5a-1.
- MAGNOLIAESTROBUS** Seward and Conway, 1935.
Magnoliaestrobis gilmouri Seward and Conway, 1935, p. 22; pl. 4, fig. 20; *Magnolia*-like infructescence; Cretaceous; west Greenland.
- MAGNOLILEPIS** Conwentz, 1886.
Magnolilepis orussica Conwentz, 1886, p. 56, pl. 6, figs. 6-8; bud scale?, in amber, Magnoliaceae; Tertiary; West Prussia.
- MAGNOLIODES** Ettingshausen, 1885.
Magnoliodes carniolica Ettingshausen, 1885, p. 19, pl. 30, fig. 22; leaf, Magnoliaceae; Miocene; Steinbruch.
- MAGNOLIOPHYLLUM**.
 Error for *Magnoliphyllum*, in Dorf, 1938, p. 64.
- MAGNOLIPHYLLUM** Conwentz, 1886.
Magnoliphyllum balticum Conwentz, 1886, p. 57, pl. 6, fig. 9; leaf, in amber, Magnoliaceae; Tertiary; West Prussia.
- MAGNOLITES** Tuzson, 1909.
Magnolites silvatica Tuzson, 1909, p. 376; wood; Schotter beds, Tertiary; Lake Balaton, Hungary. See also Tuzson, 1911, p. 44, figs. 17-21. Placed in *Dryoxylon* by Edwards, 1931.
- MAJANTHEMOPHYLLUM** Weber, 1851.
Majanthemophyllum petiolatum Weber, 1851, p. 156, pl. 18, fig. 5; leaf, Smilacaceae; Oligocene; Quegstein, Rhenish Prussia.
- MALACOTESTA** Williamson, 1876.
Malacotesta oblonga Williamson, 1876a, p. 71; seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 268, pl. 12, fig. 89; pl. 13, figs. 88, 90-93.
- MALPIGHIASTRUM** Unger, 1850.
Malpighiastrum procrustae Unger, 1850a, p. 453; Malpighiaceae; Eocene; Radoboj, Croatia. See also Unger, 1860 (1860-65), p. 30, pl. 13, figs. 4-7.
- MALVACARPUS** E. W. Berry, 1925.
Malvacarpus tertiarius E. W. Berry, 1925b, p. 217, pl. 3, fig. 6; fruit, Malvaceae; Miocene; Mirador Mesa, north of Río Shubut, Chubut province, Argentina.
- MALVOCARPON** Hollick, 1928.
Malvocarpum clarum Hollick, 1928, p. 214, pl. 75, fig. 6; fruit, compared with *Abutilon*, Malvaceae; Tertiary; Collazo River, Puerto Rico.
- MAMILLARIA** Brongniart, 1825.
Mamillaria desnoversii Brongniart, 1825, p. 423, pl. 19, figs. 9, 10; incertae sedis; Jurassic; Mamers, France.
- MAMMAEITES** Fliche, 1896.
Mammaites francheti Fliche, 1896, p. 283, pl. 13, fig. 7; seed referred to Clusiaceae; Cretaceous; Chaudefontaine near St. Meneshould, France.
- MANCHURIOPHYCUS** Endo, 1933.
Manchuriophycus yamamotoi Endo, 1933, p. 47, pl. 6, fig. 3; pl. 7, fig. 2; alga?; Nanshan formation, pre-Cambrian; near Chiao-tou Station, South Manchuria.
- MANICARITES** Bureau, 1896.
Manicarites dantescaus (Visiani) Bureau, 1896, p. 282. For *Hemiphoenices dantesiana* Visiani, 1864, p. 451, pl. 18, figs. A, B; Oligocene; Verona, Italy.
- MANIHOTITES** E. W. Berry, 1910.
Manihotites georgiana E. W. Berry, 1910b, p. 507, fig. 1; leaf, Euphorbiaceae; Cretaceous; Georgia.
- MANTELLIA** (Brongniart) Bronn, 1837.
Mantellia megalophylla (Buckland) Bronn, 1837, p. 227, pl. 15, fig. 2. First citation of genus: *Mantellia nidiformis* Brongniart, 1828b, p. 96; nom. nud.
- MARANTOIDEA** Jaeger, 1827.
Marantoidea arenacea Jaeger, 1827, p. 28, pl. 5, fig. 5; *Taeniopteris* leaf fragment; Triassic (Keuper); Stuttgart. See also Sternberg, 1838 (1820-38), p. 139.
- MARATTIOPSIS** Schimper, 1874.
 Schimper, 1874 (1869-74), suggests that the species which he formerly assigned to *Angiopteridium* (Schimper, 1869, p. 602) should all be transferred to *Marattiopsis*. Presumably type would be for *Angiopteridium münsteri* (Goeppert) Schimper, 1869, p. 603, pl. 38, figs. 1-6; frond, Marattiaceae; Rhaetic; Bayreuth, Bavaria.
- MARATTIOTHECA** Schimper, 1879.
Marattiotheca grand'euryi Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66; fertile fern pinnule, Marattiaceae; Upper Carboniferous.
- MARATTITES** Marion and Laurent, 1898.
Marattites desideratus Marion and Laurent, 1898, p. 189, pl. 1, fig. 1; fragment of fern pinnule; Cretaceous; Babadeg, Rumania.

- MARCHANTITES** Brongniart, 1849.
Marchantites sesannensis Brongniart, 1849, p. 61. First illustration for this species appears to be in Watelet, 1866, p. 40, pl. 11, fig. 6. Apparently first illustrated species is *Marchantites sinuatus* Saporta, 1865, p. 68, pl. 1, fig. 2.
- MARGARETIA** Walcott, 1931.
Margaretia dorus Walcott, 1931, p. 2, pl. 1, figs. 1-6; compared with living alga *Kallymenia*; Burgess shale, Middle Cambrian; British Columbia.
- MARGARITOPTERIS** Gothan, 1913.
Margaritopteris pseudocoemansi Gothan, 1913a, p. 169, pl. 34, figs. 6, 6a; fernlike foliage; Upper Carboniferous; Upper Silesia.
- MARIMINNA** Unger, 1843.
Mariminna meneghini Unger, 1843 (1841-47), p. 58, pl. 18, fig. 5; incertae sedis; Eocene; Monte Bolca, Italy.
- MARIOPTERIS** Zeiller, 1879.
Mariopteris nervosa (Brongniart) Zeiller, 1879, p. 69, pl. 167, figs. 1-4; fernlike foliage; Upper Carboniferous; Bassin du Bas-Boulonnais, France.
- MAROESIA** Jongmans and Gothan, 1935.
Maroesia rhomboidea Jongmans and Gothan, 1935, p. 91, pl. 18, figs. 1-3; lycopod stem impression; Upper Carboniferous; Residentie Djambi, Maroes, Sumatra.
- MARPOLIA** Walcott, 1919.
Marpolia spissa Walcott, 1919, p. 234, pl. 52, figs. 1a, 1b; alga, Cyanophyceae; Burgess shale, Middle Cambrian; north-east of Burgess Pass, British Columbia.
- MARSILIDIUM** Schenk, 1871.
Marsilidium speciosum Schenk, 1871, p. 225, pl. 26, fig. 3; leaves, incertae sedis; Wealden; Osterwald, Hannover, Germany.
- MARTINIA** Crie, 1889.
Martinia elegans Crie, 1889b, p. 20; nom. nud. See note under *Bottgeria*.
- MARTYIA** Reid, 1924.
Martyia naviculaeformis Reid, 1924, p. 327, figs. 5a-c; seed, Leguminosae; Lower Pliocene; Pont-de-Gail, France.
- MARZARIA** Zigno, 1865.
Marzaria paroliniana Zigno, 1865, p. 32; fertile fern frond fragment; Jurassic (Oolite); near Rovere di Velo, Italy. See also Zigno, 1867 (1856-68), p. 170, pl. 19, figs. 3-7.
- MASCULOSTROBUS** Seward, 1911.
Masculostrobos zeilleri Seward 1911b, p. 686, fig. 11; male inflorescence, Coniferales; Jurassic; coast of Sutherland between Brora and Helmsdale, Scotland.
- MASSULITES** Sahni and H. S. Rao, 1943.
Massulites coelatus Sahni and H. S. Rao, 1943, p. 56, pl. 7, figs. 56-63; massulae of water fern; Intertrappean cherts, early Tertiary; Sausar Tensil, Chhindwara district, Central Provinces, India.
- MASTIXICARPUM** Chandler, 1926.
Mastixicarpum crassum Chandler, 1926, p. 36, pl. 6, figs. 5a-d; endocarp, Cornaceae; Upper Eocene; Hordle, Hampshire, England.
- MASTIXIOPSIS** Kirchheimer, 1935.
Mastixiopsis nyssoides Kirchheimer, 1935, p. 293, fig. 17; seed, Cornaceae; Tertiary (Braunkohle); Riestedt, Germany. See also Kirchheimer, 1936c, p. 291, pl. 7, figs. 5a-g.
- MASTOCARPITES** Trevisan, 1856.
Mastocarpites cruceaformis (Sternberg) Trevisan, in Zigno, 1856 (1856-68), p. 22. For *Algacites cruceaformis* Sternberg, 1820-38, p. 36, pl. 2, figs. 5, 6.
- MASTOPORA** Eichwald, 1840.
Mastopora concava Eichwald, 1840, p. 204; alga?; Silurian; Russia.
- MATONIDIUM** Schenk, 1871.
Matonidium goepperti (Ettingshausen) Schenk, 1871, p. 220; pl. 27, fig. 5; pl. 28, figs. 1a-d, 2; pl. 30, fig. 3; leaves, Matoniaceae; Wealden, Germany.
- MATONIELLA** Hirmer and Hoerhammer, 1936.
Matoniella wiesneri (Krasser) Hirmer and Hoerhammer, 1936, p. 47, fig. 7; leaf, Matoniaceae; Cretaceous; Kunstadt, Mähren, Germany.
- MAUCHERIA** Broili, 1928.
Maucheria gemundensis Broili, 1928, p. 191, pls. 1, 2; Lower Devonian; Gemunden, Germany.
- MAUERITES** Zalessky, 1933.
 Reference not seen; cited in Gothan, 1942b, p. 132.
- MAUPASIA** (Munier-Chalmas) Morellet and Morellet, 1917.
Maupasias dumasi Morellet and Morellet, 1917, p. 369, pl. 14, figs. 11, 12; alga, Dasycladaceae; Tertiary; Bretagne, France. [On p. 368 these authors note "*Maupasias* Mun.-Ch. = *Maupasina* Mun.-Ch."]
- MAUPASINA** Munier-Chalmas, 1877.
 In Munier-Chalmas, 1877, p. 817; nom. nud. See *Maupasias*.
- MAWSONELLA** Chapman, 1927.
Mawsonella woolltanensis Chapman, 1927a, p. 124, pl. 6; calcareous alga; Lower Cambrian?; 9 miles west of Woolltana Head Station, South Australia.
- MAYOGYNOPHYLLUM** Kräusel, 1929.
Mayogynophyllum paucinervium Kräusel, 1929, p. 21, pl. 5, fig. 12; leaf, Anonaceae; Tertiary (Upper Miocene?); Anak Slingsing, South Sumatra.

- MAZOCARPON** (Scott) Benson, 1918.
Mazocarpon shorensense Benson, 1918, p. 579, pl. 17, figs. 1-14; petrified sigillarian cone; Upper Carboniferous; Yorkshire, England. Generic name first cited by Scott, 1907, p. 169. For recent consideration, see Schopf, 1941.
- MEDULLOPITYS** Kräusel, 1928.
Medullopitys sclerotica (Gothan) Kräusel, 1928, p. 22, pl. 1, fig. 11; pl. 2, figs. 2-6; pl. 3, figs. 1-5; petrified cordallean cone; Karroo beds, Permian; German Southwest Africa.
- MEDULLOSA** Cotta, 1832.
Medullosa stellata Cotta, 1932, p. 65, pl. 13; petrified stem with polycyclic stelar system; Permian; Chemnitz, Germany. Of the species described by Cotta this one is proposed as the type, for it is the first in order of description which clearly displays the characteristic stelar pattern. For later accounts, see Scott, 1899; Baxter, 1948; Andrews, 1945.
- MEDULLOSITES** Bureau, 1914.
Medullosites mammiger Bureau, 1914, p. 288, pl. 27, fig. 6; fern stem?; Carboniferous; Lolre, France.
- MEDULLOXYLON** Hartig, 1848.
Hartig, 1848b, proposes this genus to include certain species placed in *Dadoxylon* Endlicher. Presumably he intended *Medulloxylon withamii* (Lindley) Hartig.
- MEGADENDRON** Reichenbach, 1836.
Megadendron saxonicum Reichenbach, 1836, p. 6; Permian; Hilbersdorf, near Chemnitz, Germany.
- MEGALOMEYLON** Cribbs, 1940.
Megalomeylon myriodesmon Cribbs, 1940, p. 596, figs. 1-3, 7, 10, 12-15, 18; stem of pityean affinity; Reed Spring formation, Mississippian; Missouri.
- MEGALOPTERIS** (Dawson) E. B. Andrews, 1875.
Megalopteris dawsoni (Hartt) E. B. Andrews, 1875, p. 415; fern or pteridosperm foliage; Devonian?; St. John, New Brunswick, Canada. For *Neuropteris dawsoni* Hartt, in Dawson, 1868, p. 551, fig. 193.
- MEGALOPTERIS** Schenk, 1883.
Megalopteris nicotianaeifolia Schenk, 1883c, p. 238, pl. 32, figs. 6-8; pl. 33, figs. 1-3; pl. 35, fig. 6; fern? leaf fragments; Upper Carboniferous; Lui-pa-Kou, Hunan province, China.
- MEGALORHACHIS** Unger, 1845.
Megalorhachis elliptica Unger, 1856, p. 169, pl. 7, figs. 19-21; petiole of *Cladoxylon*?; Upper Devonian; Saalfeld, Thuringia. See also Seward, 1917, p. 204; and Posthumus, 1931; This binomial first cited in Unger, 1854; nom. nud.
- MEGALOSPERMUM** E. A. N. Arber, 1914.
Megalospermum widlii (Kidston) E. A. N. Arber, 1914, p. 91, pl. 7, fig. 28; seed; Carboniferous.
- MEGALOXYLON** Seward, 1899.
Megaloxyylon scotti, Seward, 1899, p. 172, pls. 5-7; pteridosperm stem; Upper Carboniferous; Lancashire, England.
- MEGALOSAMIA** Hosius and Marck, 1880.
Megalosamia falciformis Hosius and Marck, 1880, p. 203, pl. 43, figs. 181-183; cycadophyte petiole fragment; Lower Cretaceous; Westphalia.
- MEGAPHYTON** Artis, 1825.
Megaphyton frondosum Artis, 1825, p. 20, fig. 20; tree fern trunk showing vertical row of large leaf scars; Carboniferous; near Rowmarsh, Yorkshire, England.
- MEGATHECA** H. N. Andrews, 1940.
Megatheca thomasi H. N. Andrews, 1940, p. 597, figs. 1-3; large pteridosperm cupule, probably identical with *Calathospermum* Walton; Oil Shale group, Carboniferous Sandstone series, Lower Carboniferous; Broxburn, West Lothian, Scotland.
- MEIBOMITES** Knowlton, 1926.
Meibomites lucens Knowlton, 1926, p. 44, pl. 28, fig. 10; leaf, Papilionaceae; Latah formation, Miocene; Spokane, Wash.
- MELANCONITES** Goeppert, 1852.
Melanconites serialis Goeppert, 1852c, p. 487, nom. nud.
- MELANOSPHERITES** Gruss, 1928.
Melanosphaerites devonicus Gruss, 1928a, p. 353, figs. 16, 19, 24; fungus; Devonian; Bear Island, Norway.
- MELANOSPORITES** Pampaloni, 1902.
Melanosporites stefanii Pampaloni, 1902, p. 127, pl. 10, fig. 12; fungus peritheciium; Miocene; Melilli, Sicily.
- MELASTOMACEOPHYLLUM** (Geyler) Kräusel, 1929.
First? species described: *Melastomaceophyllum geyleri* Kräusel, 1929, p. 36, pl. 7, fig. 1; leaf, Melastomaceae; Tertiary (Upper Miocene?); Suban Pulut, South Sumatra. Genus first cited: *Melastomaceophyllum* sp. Geyler, 1887a, p. 503, pl. 35, fig. 6.
- MELASTOMITES** Unger, 1850.
Melastomites druidum Unger, 1850a, p. 480, leaf, Melastomaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 181, pl. 55, figs. 1-9.
- MELIACEAE** CARPUM Menzel, 1913.
Meliaceacarpum ligniticum Menzel, 1913, p. 39, pl. 4, fig. 22; fruit, Meliaceae; Tertiary (Braunkohle); near Herzogenrath, Prussia.

MELICARYA Reid and Chandler, 1933.

Melicarya variabilis Reid and Chandler, 1933, p. 280, pl. 11, figs. 20-24; fruit, Meliaceae; London Clay, Eocene; Sheppey, Kent, England.

MELICYTEPHYLLITES Hector, 1880.

Melitoxylon ungeri Hartig, 1848a, p. 171; 49, nom. nud.

MELITOXYLON Hartig, 1848.

Melitoxylon ungeri Hartig, 1848a, p. 171; wood; Tertiary; Germany.

MELOBESITES Massalongo, 1857.

Melobesites membranacea Massalongo, 1857b, p. 777; Eocene; Monte Bolca, Italy.

MELOPHYTUM Debey and Ettingshausen, 1859.

Melophytum cyclostigma Debey and Ettingshausen, 1859b, p. 241, pl. 7, figs. 28-30; incertae sedis; Upper Carboniferous; Aachen, Rhenish Prussia.

MEMBRANITES Fucini, 1938.

Reference not seen; cited in Gothan, 1942b, p. 132.

MEMINELLA Morellet and Morellet, 1913.

Meminella larvarioides Morellet and Morellet, 1913, p. 13, pl. 1, figs. 41, 42; alga, Dasycladaceae; Eocene; Chaussy, Croix-Blanche near Gisors, France.

MENGEA Conwentz, 1886.

Mengea palacogena Conwentz, 1886, p. 102, pl. 10, figs. 13-16; flower, in amber, Rosaceae; Tertiary; West Prussia.

MENIPHYLLOIDES E. W. Berry, 1916.

Meniphyllodes ettingshausenii E. W. Berry, 1916b, p. 166, pl. 11, figs. 4-7; leaf, Polypodiaceae; Grenada formation, lower Eocene; Grenada, Grenada County, Miss.

MENIPHYLLUM Ettingshausen, 1879.

Meniphyllum elegans Ettingshausen in Gardner and Ettingshausen, 1879, p. 36, pl. 3, figs. 10-14; fern leaf fragments, Aspidaceae; Eocene; Bournemouth, England.

MENISPERMACITES Ettingshausen, 1879.

Minispermmites abutoides Ettingshausen, 1879, p. 394; Eocene; Sheppey, England; nom. nud.

MENISPERMITES Lesquereux, 1874.

Menispermmites obtusiloba Lesquereux, 1874, p. 94, pl. 25, figs. 1, 2; pl. 26, fig. 3; leaf, dicotyledon; Cretaceous; Nebraska?

MENISPERMOPHYLLUM Velenovsky, 1901.

Menispermophyllum celakovskii Velenovsky, in Fric and Bayer, 1901, p. 128, fig. 90; leaf, dicotyledon; Cretaceous (Cenomanian); Bohemia. First citation: Velenovsky, 1889, p. 54; nom. nud.

MENOPTERIS Stenzel, 1889.

Menopteris dubia (Cotta) Stenzel, 1889, p. 12, pl. 3, figs. 19-26; fern stem; Permian; Chemnitz, Germany.

MENYPHYLLUM Ettingshausen, 1878.

Meniphyllum elegans Ettingshausen and Gardner, 1878, p. 227; fern, Aspidaceae; Eocene; Bournemouth, England; nom. nud.

MERISTOPHYLLUM Zalesky, 1937.

Meristophyllum sojanaceanum Zalesky, 1937b, p. 99, fig. 76; leaf, incertae sedis; Permian; Russia.

MERISTOPTERIS Zalesky, 1937.

Meristopteris laciniata Zalesky, 1937e, p. 590, fig. 8; incertae sedis; Upper Devonian; near village of Styła, Donets Basin, Russia.

MERTENSIDES Fontaine, 1883.

Mertensides bullatus (Bunbury) Fontaine, 1883, p. 35; pl. 15, figs. 2-5; pl. 16, figs. 1-3; pl. 17, figs. 1, 2; pl. 18, figs. 1, 2; fertile fern foliage; Triassic; Carbon Hill, Va. Apparently no connection with *Mertensites* of Wanklyn.

MERTENSITES Wanklyn, 1869.

Mertensites hantoniensis Wanklyn, 1869, p. 11, pl. 1, figs. 1, 2; fertile fern foliage, Gleicheniaceae; "Bournemouth leaf bed," Miocene; Bournemouth, England. Intended as subgenus of *Gleichenia*? but is actually used as a generic designation.

MESEMBRIOXYLON Seward, 1919.

Mesembrioxylon woburnense (Stopes) Seward, 1919, p. 207; coniferous wood; Lower Greensand, Cretaceous; Woburn, Bedfordshire, England. For *Podocarpoxylon woburnense* Stopes, 1915, p. 211, pl. 20, figs. 1, 2.

MESOCALAMITES Hirmer, 1927.

Mesocalamites roemeri (Goeppert) Hirmer, 1927, p. 382; Calamitaceae; Lower Carboniferous; various localities. For *Calamites roemeri* Goeppert, 1850, p. 45, pl. 7, fig. 6.

MESOLONCHOPTERIS Koidzumi, 1936.

Mesolonchopteris reticulata (Fontaine) Koidzumi, 1936, p. 143. For *Cladophlebis reticulata* Fontaine, in Ward, 1900a, p. 235, pl. 21.

MESONEURASTER Sandberg, 1866.

Mesoneuraster cordatus (Goeppert) Sandberg, 1866, p. 76, pl. 5, figs. 1-3; neuropterid foliage thought to bear sporangia; Permian.

MESONEVRON Unger, 1856.

Mesonevron lygioides Unger, 1856, p. 172, pl. 8, fig. 18; incertae sedis; Upper Devonian; Saalfeld, Thuringia. See also *Mesoneuron* in Posthumus, 1931.

MESOPHYLLUM Lemoine, 1930.

Mesophyllum austriacum Lemoine, 1930, p. 538, pl. 2, fig. 17a; Upper Cretaceous (Danian); Bruderndorf near Vienna, Austria.

MESOPITYS Zalessky, 1911.

Mesopitys tchihatcheffianus (Goeppert) Zalessky, 1911a, p. 28, pl. 1; pl. 2, figs. 1-5. For *Araucarites tchihatcheffianus* Goeppert, 1950, p. 235.

MESOSIGILLARIA (Grand'Eury) Weiss and Sterzel, 1893.

Mesosigillaria lepidodendrifolia (Brongniart) Weiss and Sterzel, 1893, p. 249. For *Sigillaria lepidodendrifolia* Brongniart, 1828a-38, p. 426, pl. 161.

MESOSTROBUS Watson, 1909.

Mesostrobos scottii Watson, 1909, p. 390, pl. 27; lycopodiaceous cone; Mountain 4-foot mine, Lower Coal Measures, Upper Carboniferous; Cloughfoot, Dulesgate, England.

MESOXYLOIDES Maslen, 1930.

Mesoxylodes platypodium Maslen, 1930, p. 515, pl. 25, figs. 4-6; pl. 26; pl. 28, fig. 19; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

MESOXYLON Scott and Maslen, 1910.

Mesoxylon sutcliffii (Scott) Maslen, 1910, p. 237; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Lancashire, England. See Scott, 1909, p. 511, fig. 184.

MESOXYLOPSIS Scott, 1919.

Mesoxylopsis arberae Scott, 1919, p. 17, pl. 1, figs. 7-9; pl. 2, figs. 11-14; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

METACAENOXYLON Zalessky, 1935.

Metacaenoxylon carpentieri Zalessky, 1935a, p. 740, pl. 1, figs. 3-5; pl. 2, figs. 4-6; Permian; village of Drachonina, Kuznets Basin, Russia.

METACALAMOSTACHYS Hirmer, 1927.

Metacalamostachys palaeacea (Stur) Hirmer, 1927, p. 454, fig. 544; Upper Carboniferous; Loire, France.

METACEDROXYLON Holden, 1913.

Metacedroxylon araucarioides Holden, 1913, p. 538, pl. 40, figs. 17-21; coniferous wood; Jurassic (Oolite); Whitby and Scarborough, England.

METACLEPSYDROPSIS Paul Bertrand, 1907.

Metaclepsydropsis duplex (Williamson) Paul Bertrand, 1907, p. 776, coenopterid fern; Carboniferous. See also Bertrand, Paul, 1909, p. 121, pl. 2, fig. 7; and Posthumus, 1931.

METACORDAITES Renault, 1896.

Metacordaites rigolleti Renault, 1896b, p. 91, figs. 1-10; cordaitan stem; Carboniferous; Autun, France.

METACUPRESSINOXYLON Torrey, 1923.

Metacupressinoxylon cedroides (Holden) Torrey, 1923, p. 84. For *Paracupressinoxylon cedroides* Holden, 1913, p. 537, pl. 39, figs. 11-14; Jurassic; Yorkshire, England.

METASEQUOIA Miki, 1941.

Metasequoia disticha (Heer) Miki, 1941, p. 262, pl. 5; cones and foliage, Taxodiaceae; lower Pliocene; central Hondo, Japan.

METASOLENOPORA Yabe, 1912.

Metasolenopora rothpletzi Yabe, 1912, p. 2, pl. 1, figs. 2, 3; alga; Upper Jurassic to Lower Cretaceous; Shikoku, Japan.

METROSIDEROPHYLLITES Hector, 1880.

Metrosiderophyllites ovata Hector, 1880, p. 49; nom. nud.

METZGERIITES Steere, 1946.

Metzgeriites glebosus (Harris) Steere, 1946, p. 306; liverwort, Jungermanniales; *Thaumatopteris* zone, Lower Jurassic (Liassic); Neill's Cliff, Scoresby Sound, east Greenland. For *Hepaticites glebosus* Harris, 1931b, p. 4, pl. 1, figs. 3, 4.

MEYENITES Unger, 1842.

Meyenites acquimontanus Unger, 1842, p. 102; wood; Miocene; Gleichenberg, Styria. See also Unger, 1854c, p. 183, pl. 7, figs. 4-6.

MIADESMIA C. E. Bertrand, 1895.

Miadesmia membranacea C. E. Bertrand, 1895, p. 588; lycopod cone; Carboniferous; Hough Hill, Staleybridge, England. See also Benson, 1908, pls. 30-37.

MICHEEVIA Zalessky, 1930.

Micheevia uralica Zalessky, 1930a, p. 738, pl. 72, figs. 1-4; pl. 73, fig. 2; lycopod stem impression; Carboniferous; Podosinino, Oural, Russia.

MICONIIPHYLLUM Dusen, 1908.

Miconiiphyllum australe Dusen, 1908, p. 2, pl. 1, fig. 14; leaf, dicotyledon; Tertiary; Seymour Island, Antarctic Ocean.

MICROCHEIRIS Harris, 1935.

Microcheiris enigma Harris, 1935, p. 118, pl. 8; seed-bearing organ, Caytoniales?; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

MICROCHORTON Reis, 1923?

Microchorton claviger Reis, 1923, p. 109, pl. 3, figs. 10-13; pl. 5, fig. 1; Tertiary; Rhenish Prussia.

MICROCOCITES Meschinelli, 1898.

Micrococites lepidophagus (Renault) Meschinelli, 1898, p. 62, pl. 18, fig. 13; pl. 19, figs. 5, 6; Schizomycete, in coprolite; Permian.

MICROCOCCLUS Renault, 1895.

Micrococcus quignardi Renault, 1895a, p. 218; bacteria; Upper Carboniferous (Stephanien); Grand Croix, France. See also Renault, 1895b, p. 450, fig. 10.

MICROCODIUM Gluck, 1912.

Microcodium elegans Gluck, 1912, p. 4, pls. 1-4; Tertiary (Braunkohle); Baden, Germany.

MICRODICTYON Saporta, 1872.

Microdictyon rutenicum Saporta, 1872-73, p. 309, pl. 33, figs. 2-4; pl. 35, fig. 3; pl. 44, fig. 5; fern foliage; Jurassic; Liqueuse, France.

MICROLEPIDIUM Velenovsky, 1889.

Microlepidium striatulum Velenovsky, 1889, p. 11, pl. 1, figs. 25-27; cone, Coniferales; Upper Cretaceous; Lipenec, Bohemia.

MICROPHYCUS Matthew, 1890.

Microphycus catenatus Matthew, 1890a, p. 146, pl. 5, fig. 6; alga?; Cambrian; Canada.

MICROPHYLOPTERIS E. A. N. Arber, 1917.

Microphylopteris pectinata (Hector) E. A. N. Arber, 1917, p. 40, pl. 7, figs. 3-6, 8-11; Lower Jurassic; Mataura Falls, New Zealand; and Cretaceous (Neocomian); Waikato Heads, New Zealand.

MICROPODIUM Saporta, 1861.

Micropodium oligospermum Saporta in Heer, 1861, p. 149; seed, Leguminosae?; Eocene; Aix, Provence, France. See also Saporta, 1873a, p. 123, pl. 18, fig. 1.

MICRORRHAGION Ettingshausen, 1883.

Microrrhagion liversidgei Ettingshausen, 1883, p. 112, pl. 1, figs. 7-11; monocotyledonous infructescence?; Tertiary; Wallerawang, New South Wales.

MICROSPERMopteris Baxter, 1949.

Microspermopteris aphyllum Baxter, 1949, p. 289, pls. 2-5; petrified stem, Pteridospermae?; Des Moines group, Pennsylvanian; What Cheer, Iowa.

MICROSPERMUM E. A. N. Arber, 1914.

Microspermum samaroides (Carpenter) E. A. N. Arber, 1914, p. 106, and 90, pl. 7; seed; Carboniferous (Westphalian); northern France.

MICROSTROMIUM Reinsch, 1881.

Microstromium sp. Reinsch, 1881, p. 91, pl. 31a, figs. 1-7; Upper Carboniferous; Zwickau, Saxony.

MICROTAENIA Knowlton, 1918.

Microtaenia variabilis Knowlton, 1918, p. 81, pl. 29, figs. 1-4; fertile fern foliage, Polypodiaceae; Frontier formation, Upper Cretaceous; Cumberland (15 miles south of Kemmerer), Wyo.

MICROTESTA Chapman, 1927.

Microtesta triassica Chapman, 1927b, p. 144, pl. 12, fig. 38; seed, incertae sedis; Triassic; Bald Hill, Bacchus Marsh, Victoria.

MICROTHYRIACITES Cookson, 1947.

Microthyriacites fimbriatus Cookson, 1947b, p. 211, pl. 13, fig. 17; ascomata, Microthyriaceae; Oligocene-Miocene; Travalgon, Victoria.

MICROTHYRITES Pampaloni, 1902.

Microthyrites disodilis Pampaloni, 1902, p. 127, pl. 11, fig. 1; fungus peritheciium?; Miocene; Melilli, Sicily.

MICROTINOMISCIUM Reid and Chandler, 1933.

Microtinomiscium foveolatum Reid and Chandler, 1933, p. 164, pl. 4, figs. 5, 6; fruit, Menispermaceae; London Clay, Eocene; Minster, Kent, England.

MICROZYGIA Read, 1936.

Microzygia lacunosa Read, 1936b, p. 223, fig. 9; petrified petiole, Palaeopteridales; New Albany shale, Upper Devonian; Junction City, Boyle County, Ky.

MILDRAEDIODENDRON Harms, 1920.

Mildraediodendron excelsum Harms, in Menzel, 1920, p. 26; Pleistocene; Jonje, Dibundja, Africa.

MILLERIA Lang, 1926.

Milleria thomsoni Lang, 1926, p. 790, pl. 1, figs. 6-8; fertile "frond," compared with *Aneurophyton germanicum*; Old Red Sandstone, Devonian; Yesknary, Orkney, Scotland.

MIMOSITES Bowerbank, 1840.

Mimosites browniana Bowerbank, 1840, p. 140, pl. 17, fig. 42; fruit, Leguminosae; Eocene; Isle of Sheppey, Kent, England.

MINSTEROCARPUM Reid and Chandler, 1933.

Minsterocarpum alatum Reid and Chandler, 1933, p. 416, pl. 21, figs. 26-31; fruit, Lythraceae; London Clay, Eocene; Sheppey, Kent, England.

MIQUELITES Goeppert, 1854.

Miquelites elegans Goeppert, 1854, p. 56, pl. 1, figs. 6, 7; wood, incertae sedis; Tertiary; Java.

MIRBELLITES Unger, 1845.

Mirbellites lesbius Unger, 1845, p. 242; wood; Tertiary?; Island of Lesbos, Greece.

MITCHELDEANIA Wethered, 1886.

Mitcheldeania nicholsoni Wethered, 1886, p. 535, pl. 14, fig. 6; plant?; Lower Carboniferous; Mitcheldean, England.

MITROPICEA Debey, 1848.

Mitropicea decheni Debey, 1848, p. 120; nom. nud.

MITROSPERMUM Arber, 1910.

Mitrospermum compressum (Williamson) Arber, 1910, p. 503, pls. 37-39; petrified seed, Cordaitales?; Lower Coal Measures, Upper Carboniferous; Oldham, Lancashire, England.

MITSCHERLICHIA Lorenz, 1904.

Mitscherlichia chinensis Lorenz, 1904, p. 194; alga; Cambrian; Shantung, China.

MITTAGIA Lignier, 1913.

Mittagia seminiformis Lignier, 1913, p. 65, pl. 8; sporangia; Carboniferous (Westphalien); Ostrau, Silesia.

MIXONEURA C. E. Weiss, 1870.

Mixoneura obtusa (Brongniart) C. E. Weiss, 1870a, p. 865. For *Odontopteris obtusa* Brongniart, 1828-38, pl. 78, figs. 3, 4; fernlike foliage; Carboniferous.

MIZZIA Schubert, 1908.

Mizzia velebitana Schubert, 1908, p. 382, fig. 5; pl. 16, figs. 8-12; Upper Carboniferous; Dalmatia, Austria-Hungary.

MOELLERINA Ulrich, 1886.

Moellerina greenei Ulrich, 1886, p. 34, pl. 3, fig. 8; Devonian; Ohio.

MOHLITES Unger, 1839.

Mohlites parenchymatosus Unger, 1839, p. 13. See Unger, 1854, p. 182, pl. 6, figs. 14-16.

MOKRAWIA Knopp, 1933.

Preuss. geol. Landesanst. Inst. Paläobotanik u. Petrographie Brennsteine Arb., Band 3, p. 158 (not seen, cited in Gothan, 1942b, p. 133).

MOLASPORA Schemel, 1950.

Molaspora rugosa Schemel, 1950, p. 753, fig. 12; spore?; Cretaceous; Plymouth County, Iowa.

MOLTENIA Du Toit, 1927.

Moltenia dentata Du Toit, 1927, p. 380, fig. 20; bennettitalean? leaf; Molteno beds, Upper Triassic; Waterfal, Upper Umkomas Valley, Natal.

MOMIPITES Wodehouse, 1933.

Momipites coryloides Wodehouse, 1933, p. 511, fig. 43; pollen, Ulmaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

MONEMITES Massalongo, 1850.

Monemites codioides Massalongo, 1850, p. 25; alga; Eocene; Monte Bolca, Italy.

MONHEIMIA Debey and Ettingshausen, 1859.

Monheimia polypodioides Debey and Ettingshausen, 1859b, p. 211, pl. 3, figs. 34-36; pl. 4, figs. 1, 2, 21; fern frond fragment; Upper Cretaceous; Aachen, Rhenish Prussia.

MONILITES Pampaloni, 1902.

Monilites albidus Pampaloni, 1902, p. 128, pl. 11, fig. 2; fungus mycelium with conidia; Miocene; Melilli, Sicily.

MONIMIOPSIS Saporta, 1868.

Monimiopsis amboraeifolia Saporta, 1868, p. 361, pl. 8, fig. 13; leaf, Monimlaceae; Eocene; Sézanne, France.

MONOCARPELLITES Perkins, 1904.

Monocarpellites whitfieldii Perkins, 1904, p. 180, pl. 76, fig. 21; fruit; Tertiary; Brandon, Vt.

MONOCARPIA Jongmans and Gothan, 1935.

Jaarb. mijnwezen Nederlandish-Indië, 1930, Verh., boekdeel 59, p. 97 (not seen, cited in Gothan, 1942b, p. 133).

MONOCERAS.

Apparently error for *Monocercocarpus*, in Gothan, 1909, p. 399.

MONOCEROCARPUS Raciborski, 1909.

Monocercocarpus miocaenicus Raciborski, 1909, p. 283, fig. 4; Miocene; Tjilatjap, Pupu Merak, Java.

MONOCOTYLOPHYLLUM Reid and Chandler, 1926.

Monocotylrophyllum sp. Reid and Chandler, 1926, p. 87, pl. 5, fig. 12; monocotyledonous leaf, family uncertain; Bembridge marl, Oligocene; Isle of Wight, England.

MONODOROSPERMUM Warburg, 1897.

Monodorospermum bangkanum Warburg, 1897, p. 232, pl. 4, figs. 1-5; Pliocene; Bangka Island, Indonesia.

MONOLETES (Ibrahim, 1933) emended by Schopf, Wilson, and Bentall, 1944.

Monoletes ovatus Schopf, 1936, p. 108, fig. 7. See also Ibrahim, 1933, p. 39; Schopf, Wilson, and Bentall, 1944, p. 38.

MONOPHYLLITES Kuntze, 1904.

No species name assigned, in Post and Kuntze, 1904, p. 373.

MONOSPHENOPHYLLUM Lotsy, 1909.

No new combination actually made but intended as *Monosphenophyllum dawsoni* (Williamson) Lotsy, 1909, p. 525, fig. 349, III.

MONOSULCITES Erdtman, 1948.

Monosulcites magnolioides Erdtman, 1948, p. 269, fig. 11; pollen, affinities with *Magnolia*?; Lower Jurassic (Liasic); Palsjo, Scania, Sweden.

MONTIELLA (Munier-Chalmas) Morellet and Morellet, 1922.

Montiella munieri Morellet and Morellet, 1922, p. 12, pl. 9, figs. 31, 32; alga, Dasycladaceae; Eocene (Montien); Mons, Belgium.

MORANIA Walcott, 1919.

Morania confuens Walcott, 1919, p. 226, pl. 43, figs. 1-6; pl. 44, figs. 1-11; pl. 45, fig. 1; pl. 58, fig. 3; alga, Nostocaceae; Middle Cambrian; 1 mile northeast of Burgess Pass, above Field, British Columbia.

MORANIA Seward and Sahni, 1920.

Morania oldhami (Zeiller) Seward and Sahni, 1920; coniferous shoot; Lower Gondwana, "Permo-Carboniferous"; Moran Valley, India. See *Morano-cladus*. For *Araucarites oldhami* Zeiller, 1902, p. 36, pl. 7, fig. 6.

MORANOCLADUS Seward and Sahni, 1926.

Morano-cladus oldhami (Zeiller) Seward and Sahni, 1926, p. 288. Change of name for *Morania* Seward and Sahni; see above.

MOREAUIA Pomel, 1849.

Moreauia araucarina Pomel, 1849, p. 350.

MORELLETOPORA Varma, 1950.

Morelletopora nammalensis Varma, 1950, p. 207, 2 figs.; alga, Dasycladaceae; Paleocene; Nammal Gorge of the Punjab Salt Range, India.

MOREOPHYLLUM Geyler, 1887.

Moreophyllum sp. Geyler, 1887a, p. 492, pl. 34, figs. 4, 5; leaf fragments, Moraceae; Eocene; Labuan, Borneo.

MORESNETIA Stockmans, 1946.

Moresnetia zaleskyi Stockmans, 1946a, p. 1, fig. 1; Upper Devonian; Belgium. For full account, see Stockmans, 1948, p. 55, pl. 9, figs. 1-7a.

MORICONIA Debey and Ettingshausen, 1859.

Moriconia cyclotoxon Debey and Ettingshausen, 1859b, p. 239, pl. 7, figs. 23-27; fern foliage; Upper Cretaceous; Aachen, Rhenish Prussia.

MORINDIDIUM Stiehler, 1861.

Morindidium brongniarti Stiehler, 1861, p. 124.

MORINUM Ettingshausen, 1854.

Morinum populifolium Ettingshausen, in Reuss, 1854, p. 740; Cretaceous (Cenomanian); Moletein, Moravia; nom. nud.

MOROSPORIUM Renault and Roche, 1898.

Morosporium lignitum Renault and Roche, 1898, p. 227, pl. 13, figs. 1-3; fungus mycelium with conidia; Eocene; He-rault, France.

MUCEDITES Bertrand and Renault, 1896.

Mucedites stercoraria Bertrand and Renault, in Renault, 1896a, p. 443, figs. 91, 92; fungus, in coprolites; Upper Carboniferous; Igornay, France.

MUCORITES Meschinelli, 1898.

Mucorites combrensis (Renault) Meschinelli, 1898, p. 9, pl. 5, fig. 13; fungus, Phycmycete, in lycopod macrospore; Carboniferous; Loire, France.

MUCORODIUM Zalesky, 1915.

Mucorodium paleomycoides Zalesky, 1915, p. 57; pl. 4, figs. 1-4; pl. 5; pl. 6, figs. 1-3; pl. 7, figs. 1-6; mycelium, Mucoraceae; Carboniferous; Russia.

MUCUNITES Heer, 1859.

Mucunites grepini Heer, 1859, p. 103, pl. 134, figs. 9-12; Tertiary; Switzerland.

MUNDAPTERIS Teixeira, 1948.

Mundapteris delicata Teixeira, 1948, pl. 44, figs. 1-9; fernlike foliage; Cretaceous; Vila Verde de Tentugal, Portugal.

MUNIERIA Hantken, 1883.

Munieria baconica Hantken, in Deecke, 1883, p. 9, pl. 1, figs. 4-10; siphonaceous alga; Cretaceous; Bakony, Hungary.

MUNIERINA Viguiet, 1907.

Munierina oceanica, Viguiet, 1907a, p. 605; flower, Ranunculaceae?; Eocene; Sézanne, France.

MÜNSTERIA Sternberg, 1833.

Münsteria vermicularis Sternberg, 1833 (1820-38), p. 32, pl. 1, fig. 3; alga?; Jurassic; Solenhofen, Bavaria.

MURCHISONITES Goeppert, 1859.

Murchisonites forbesii Goeppert, 1859, p. 441, pl. 35, fig. 1.

MUSAEITES Presl, 1838.

Musaeites primaevus Presl, in Sternberg, 1838 (1820-38), p. 191, pl. 39, fig. 6; stem, incertae sedis; Carboniferous; Kruschowitz, Bohemia.

MUSCITES Brongniart, 1828.

Muscites tournaillii Brongniart, 1828 (1828a-38), p. 93, pl. 10, figs. 1, 2; moss; Tertiary; Armissan near Narbonne, France.

MUSITES.

Mistake? for *Muscites*, in Pimenova, 1929, p. 192.

MUSCOCARPUM (Brongniart) Grand'Eury, 1877.

Muscocarpum prismaticum Brongniart, in Grand'Eury, 1877, p. 184, pl. 15, fig. 3 (plate is labelled *Trigonocarpus*?); seed; Carboniferous; Roche-la-Molière, France. See *Muscocarpum prismaticum* Brongniart, 1828b, p. 137; nom. nud.; also Seward, 1917, p. 361.

MUSOPHYLLUM Goeppert, 1854.

Musophyllum truncatum Goeppert, 1854, p. 39, pl. 7, fig. 47; leaf fragment, referred to Musaceae; Eocene; Java. Earlier citation by Goeppert, 1853a, p. 434; nom. nud.

MUSOXYLON Meschinelli and Squinabol, 1893.

Musoxylon antracotherii (Massalongo) Meschinelli and Squinabol, 1893, p. 194; Scitamineae; Tertiary; Italy.

MYCOGEMMA Zalesky, 1915.

Mycogemma saccharomycoides Zalesky, 1915, p. 64; pl. 10, figs. 5-7; pl. 11; mycelium, Ascomycete?; Carboniferous; Russia.

MYCORHIZONIUM F. E. Weiss, 1904.

Mycorrhizonium sp. F. E. Weiss, 1904a, p. 264, pls. 18, 19; mycorrhizal fungus; Halifax Hard bed; Upper Carboniferous; England.

MYELOCALAMITES Grand'Eury, 1877.

Myelocalamites approximatus (Schlotheim) Grand'Eury, 1877, p. 510. For *Calamites approximatus* Schlotheim, 1820, p. 399; see also Artis, 1825, p. 4, pl. 4.

MYELOPHYCUS Ulrich, 1904.

Myelophycus curvatum Ulrich, 1904, p. 145, pl. 13, fig. 2; alga?; Yakutat formation, Lower Jurassic (Liassic); Woody Island, Kodiak, Alaska.

MYELOPITHYS Corda, 1845.

Myelopithys medullosa Corda, 1845, p. 30, pl. 11, figs. 4-8; fragment of *Medullosa* stem?; Carboniferous; Mühlhausen, Bohemia.

MYELOPTERIS Renault, 1874.

Mylopteris radiata Renault, 1874, p. 259, medullosan petiole; Permian?; Autun, France.

MYELOXYLON Brongniart, 1849.

Myeloxylon elegans (Cotta) Brongniart, 1849, p. 109. For *Medullosa elegans* Cotta, 1832, p. 61, pl. 12, figs. 1-5. These illustrations actually convey little information. The following is suggested as a more suitable type species: *Myeloxylon radiatum* (Renault) Schenk, see Zeiller, 1890, p. 290, pl. 27, fig. 1.

MYOPORIPHYLLUM Ettingshausen, 1891.

Myoporiphyllum angustum Ettingshausen, 1891, p. 291; pl. 5, figs. 24, 25; leaf, *Asperifoliaceae*; Miocene; Johannistollen, Schoenegg, Styria.

MYRCIPHYLLUM Engelhardt, 1891.

Myrciphyllum ambiguoides Engelhardt, 1891, p. 681, pl. 3, fig. 5; leaf fragment, *Myrtaceae*; Tertiary; Chile.

MYRIASPERMUM C. F. W. Braun, 1840.

Myriaspermum granum C. F. W. Braun, 1840, p. 105; nom. nud.

MYRICAEPHYLLUM Fontaine, 1889.

Myricaephyllum dentatum Fontaine, 1889, p. 316, pl. 156, fig. 6; leaf, compared with *Myrica*; Potomac group, Lower Cretaceous; near Brooke, Va.

MYRICANTHIUM Velenovsky, 1889.

Myricanthium amentaceum Velenovsky, 1889, p. 16, pl. 2, figs. 24-26; inflorescence, *Myricaceae*?; Cretaceous (Cenomanian); Vyserovic, Bohemia.

MYRICIPHYLLUM Conwentz, 1886.

Myriciphyllum oligocenicum Conwentz, 1886, p. 42, pl. 4, figs. 14-16; leaf, in amber, *Myricaceae*; Tertiary; West Prussia.

MYRICIPITES Wodehouse, 1933.

Myricipites dubius Wodehouse, 1933, p. 506, fig. 33; pollen, *Myricaceae*; Parachute Creek member, Green River formation; Eocene; Colorado and Utah.

MYRICOPHYLLUM Saporta, 1862.

Myricophyllum gracile Saporta, 1862, p. 255; pl. 10, fig. 1; leaf, *Proteaceae*; Tertiary; Aix, Provence, France.

MYRIOPHYLLITES Artis, 1825.

Myriophyllites gracilis Artis, 1825, p. 12, pl. 12; roots, incertae sedis; Carboniferous; near Wentworth, Yorkshire, England.

MYRIOPHYILLOIDES Hick and Cash, 1881.

Myriophylloides williamsoni Hick and 1881, p. 404, pl. 21; calamitean roots; Upper Carboniferous; Halifax, England. See also Seward, 1898, p. 342.

MYRIOTHECA Zeiller, 1883.

Myriothea desaillyi Zeiller, 1883, p. 187, pl. 9, figs. 18-20; fertile fern frond; Upper Carboniferous; Pas-de-Calais, France.

MYRISTICOPHYLLUM Geyler, 1887.

Myristicophyllum minus Geyler, 1887a, p. 498, pl. 33, figs. 5, 6; leaf fragments, *Myristicaceae*; Eocene; Labuan, Borneo.

MYRISTICOCXYLON Boureau, 1950.

Myristicoxylon princeps Boureau, 1950a, p. 523, pl. 1, figs. 1, 2; *Oligo-Miocene*; Sahara Soudanese, Asselar.

MYRMEKIOPORELLA Pia, 1925.

Myrmekioporella mosana Pia, 1925, p. 85, pl. 1, fig. 8; alga, *Siphoneae Verticillatae*; Jurassic (Malm); St. Mihiel, France.

MYRSINITES Ettingshausen, 1868.

Myrsinites antiquus Ettingshausen, 1868a, p. 227, pl. 37, fig. 26; leaf, *Myrsinaceae*; Miocene; Priesen, Bohemia.

MYRSINOPHYLLUM Velenovsky, 1889.

Myrsinophyllum varians Velenovsky, 1889, p. 25, pl. 4, figs. 8, 9; pl. 5, fig. 12; pl. 6, figs. 10, 11; leaf, compared with *Myrsine feruginea* (*Myrsinaceae*); Upper Cretaceous (Cenomanian); Lidice, Bohemia.

MYRSINOPSIS Conwentz, 1886.

Myrsinopsis succinea Conwentz, 1886, p. 118, pl. 11, figs. 21-23; flower, in amber, *Myrsinaceae*; Tertiary, West Prussia.

MYRTHOMYOPHYTON Massalongo, 1857.

Myrthomyophyton stephanophorus Massalongo, 1857b, p. 777; Eocene; Monte Bolca, Italy; nom. nud.

MYRTIFOLIUM Unger, 1864.

Myrtifolium lingua Unger, 1864, p. 10, pl. 4, figs. 1, 2; leaf, *Myrtaceae*; Tertiary; Drury, near Auckland, New Zealand.

MYRTIPHYLLUM Dusen, 1899.

Myrtiphyllum bagualense Dusen, 1899, p. 103, pl. 11, figs. 7-9; leaves, compared with *Eugenia* (*Myrtaceae*); Oligocene; Baguales, Chile.

MYRTOMIOPHYTON Massalongo, 1858.

Myrtomiophyton stephanophorus Massalongo, 1858b, p. 769; fruit, Myrtaceae; Tertiary. *See also* Massalongo, 1859a, p. 77, pl. 32, fig. 1.

MYRTONIUM Ettingshausen, 1887.

Myrtonium obtusifolium Ettingshausen, 1887a, p. 133, pl. 14, fig. 20; pl. 15, figs. 14, 15; leaf, Myrtaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

MYRTOPHYLLUM Heer, 1869.

Myrtophyllum geinitzi Heer, 1869a, p. 22, pl. 11, figs. 3, 4; Upper Cretaceous (Cenomanian); Moletain, Moravia.

MYXOMYCETES Renault, 1895.

Myxomycetes mangini Renault, 1895d, p. 77, fig. 2; Upper Carboniferous; Combres, France. Meschinelli, 1898, p. 71, changes the spelling to *Myxomycites*.

MYXOMYCITES.

See Myxomycetes, Renault.

N

NAGEIOPSIS Fontaine, 1889.

Nageiopsis longifolia Fontaine, 1889, p. 195, pl. 75, fig. 1; pl. 76, figs. 2-6; pl. 77, figs. 1, 2; pl. 78, figs. 1-5; cycadophyte? foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.

NAIADEA.

See Naiadita.

NAIADITA Buckman, 1850.

Naiadita lanceolata Buckman, 1850, p. 415, fig. 2; emended by Harris, 1938. Original citation appears in Murchison, 1845, p. 52. Various spelled as *Naiudes*, *Najadita*, *Najadites*, *Naiadea*. For comprehensive review and complete synonymy, *see* Harris, 1938, p. 17-18.

NAIADITES.

See Naiadita.

NAJADITA.

See Naiadita.

NAJADITES.

See Naiadita.

NAJADONIUM Ettingshausen, 1872.

Najadonium longifolium Ettingshausen, 1872, p. 173, pl. 3, figs. 3-5; leaf, Najadaceae?. Original citation: Ettingshausen, 1871, p. 410; nom. nud.

NAJADOPSIS Heer, 1855.

Najadopsis dichotoma Heer, 1855, p. 104, pl. 48, figs. 1-6; stem fragments?; Najadaceae; Tertiary; Oeningen, Switzerland.

NAKTONGIA Oishi, 1939.

Naktongia yabei Oishi, 1939, p. 310, pl. 35, fig. 3; fertile fern foliage; Naktong series, Upper Jurassic; Korea.

NATHORSTIA Heer, 1880.

Nathorstia angustifolia Heer, 1880b, p. 7, pl. 1, figs. 1-6; fertile fern pinnules; Cretaceous; Pattorfik, Greenland.

NATHORSTIA Seward, 1894.

Nathorstia valdensis Seward, 1894a, p. 145, pl. 7, fig. 5; fernlike foliage; Wealden.

NATHORSTIANA Richter, 1909.

Nathorstiana arborea Richter, 1909 (1906-09), p. 3, pl. 8, figs. 1-3, 5, 8, 13; pl. 10, figs. 11, 15; Lower Cretaceous; Quedlenburg, Prussian Saxony.

NAUCLEOXYLON Crie, 1888.

Naucleoxylon spectabile Crie, 1888, p. 19, pl. 8, figs. 1, 2; Pliocene; Buitenzorg, Java.

NAVAJOIA Wieland, 1928.

Navajoia magnifica Wieland, 1928, p. 391; petrified cycadean trunks; Chuska Mts., N. Mex.; nom. nud.

NECHALEA Debey, 1848.

Neckalea serrata Debey, 1848, p. 115; nom. nud.

NECTANDROPHYLLUM Engelhardt, 1891.

Nectandrophyllum sp. Engelhardt, 1891, p. 654, pl. 4, fig. 6; pl. 9, fig. 12; leaf, Lauraceae; Tertiary; Chile.

NEGUNDOIDES Lesquereux, 1868.

Negundoides acutifolia Lesquereux, 1868, p. 101; leaves, compared with *Acer*; Cretaceous; north of Fort Ellsworth, Nebr. *See also* Lesquereux, 1874, p. 97, pl. 21, fig. 5.

NELUMBITES E. W. Berry, 1911.

Nelumbites virginienensis (Fontaine) E. W. Berry, 1911a, p. 463, pl. 82, figs. 3-5; leaf, Nymphaeaceae; Patapsco formation, Lower Cretaceous; Maryland and Virginia.

NEMAELADA John Smith, 1896.

Nemaclada alternata John Smith, 1896, p. 320, pl. 7, fig. 10; fragment of mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.

NEMALIONITES Massalongo, 1851.

Nemalionites limacoides Massalongo, 1851, p. 41; nom. nud.

NEMAFLANA John Smith, 1896.

Nemaflana filiforme John Smith, 1896, p. 320, pl. 7, fig. 9; fragment of mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.

NEMATOLITES Keeping, 1882.

Nematolites edwardsii Keeping, 1882, p. 489, pl. 11, figs. 8-11; alga; various localities, central Wales.

NEMATOPHORA Gruss, 1924.

Nematophora fascigera Gruss, 1924, p. 8, pl. 5, fig. 44; pl. 6, figs. 10, 10, 13; Devonian; Magdalena Bay, Spitzbergen.

NEMATOPHYCUS Carruthers, 1872.

Nematophycus logani (Dawson) Carruthers, 1872, p. 160, pls. 21, 22; a problematical alga?; Devonian; Gaspé, Canada. See Arnold, 1947, p. 52.

NEMATOPHYLLITES S. A. Miller, 1892.

Nematophyllites angustus (Fontaine and White) S. A. Miller, 1892, p. 665. For *Nematophyllum angustum* Fontaine and White, 1880, p. 35, pl. 2, figs. 1-5; Permian?; West Union, W. Va.

NEMATOPHYLLUM Fontaine and White, 1880.

Nematophyllum angustum Fontaine and White, 1880, p. 35, pl. 2, figs. 1-5; apparently close to *Asterophyllites*; Waynesburg Coal, Pennsylvanian or Permian(?); West Union, W. Va. See *Nematophyllites*.

NEMATOPHYTON Dawson, 1888.

Nematophyton logani Dawson, 1888, p. 21; marine alga?; Devonian; Gaspé, Canada. For *Prototaxites logani* Dawson, 1859, p. 484, figs. 4a-c. See Arnold, 1947, p. 52.

NEMATORITES Gruss, 1928.

Nematorites oscillatoriiformis Gruss, 1928b, p. 506, pl. 41, figs. 19, 20.

NEMATOTHALLUS Lang, 1937.

Nematothallus pseudovasculosa Lang, 1937, p. 269, pl. 11, figs. 56, 60, 61, 64; pl. 12, figs. 70-82; incertae sedis; Downtonian, Devonian; Perton Quarry, Saltwells, South Pembrokeshire, England.

NEMATOXYLON Dawson, 1863.

Nematoxylon crassum Dawson, 1863a, p. 466, pl. 19, fig. 24; compared with *Prototaxites* but with larger cells and no "medullary rays"; Devonian; Gaspé, Canada.

NEOCALAMITES Halle, 1908.

Neocalamites hoerensis (Schimper), Halle, 1908, p. 6, pls. 1, 2; calamitean stem; Lower Jurassic; Helsingborg, Bjuf, Skromberga, etc., Sweden.

NEOCALLIERGON Williams, 1930.

Neocalliergon integrifolium Williams, 1930, p. 36, pl. 5, figs. 8-11; moss, compared with *Calliergon* and *Calliergonella*; Pleistocene; Minneapolis; Minn.

NEOCHONDRITES Saporta, 1893.

Neochondrites sp. Saporta, 1893b, p. 121; nom. nud.

NEOGYROPORELLA Yabe and Toyama, 1949.

Neogyroporella elegans Yabe and Toyama, 1949, p. 163, figs. 5-10; alga, Dasycladaceae; Torinosu limestone, Upper Jurassic; Hanabata Togano-mura, Japan.

NEOZAMIA Pomel, 1846.

Neozamia joubertiana Pomel, 1846, p. 655. For *Flabellaria borassifolia* Sternberg, 1820-38, p. 32, pl. 18.

NEPHELITES Deane, 1902.

Nephelites equidentata Deane, 1902a, p. 61, pl. 15, fig. 3; leaf, compared with *Quercus dampieri* Ettingshausen; Tertiary; Wingello, New South Wales.

NEPHROPSIS Zalesky, 1912.

Nephropsis integerrima (Schmalhausen) Zalesky, 1912, p. 28. A name suggested by Zalesky for *Ginkgo integerrima* Schmalhausen, 1879, p. 85, pl. 16, figs. 12-15; *Ginkgo*-like leaves; Permian; Lower Tougouska, Russia. See also Seward, 1919, p. 77.

NEPHROPTERIS Brongniart, 1849.

Nephropteris obliqua Brongniart, 1849, p. 65. For *Cyclopteris obliqua* Brongniart, 1828a-38, p. 221, pl. 61, fig. 3; cyclopterid "stipule"; Carboniferous; Greenough, Yorkshire, England.

VEREOGRAPSUS Geinitz, 1864.

Nereograpsus jacksoni (Emmons) Geinitz, 1864, p. 6, pl. 2, fig. 4; plant?.

NERIOPTERIS Newberry, 1873.

Neriopteris lanceolata Newberry, 1873, p. 381, pl. 45; fernlike foliage; Pennsylvanian; near Cuyahoga Falls, Summit County, Ohio.

NERITINUM Unger, 1850.

Neritinium dubium Unger, 1850b, p. 125, pl. 14, fig. 13; leaves, Apocynaceae; Miocene; Radoboj, Croatia. Cited by Unger, 1845 (1841-47), p. 81; nom. nud.

NEURALETHOPTERIS Cremer, 1893.

Neuralethopteris schlehani (Stur) Cremer, 1893, p. 33. For *Neuropteris schlehani* Stur, 1877, p. 183, pl. 11, figs. 7, 8; Lower Carboniferous; Witkowitz, Moravia.

NEUROCALLIPTERIS Sterzel, 1895.

Neurocallipteris gleichenioides (Stur) Sterzel, 1895, p. 285, pl. 8, fig. 6; pl. 9, fig. 1.

NEUROCARDIOPTERIS Lutz, 1933.

Neurocardiopteris broilii Lutz, 1933, p. 138, pl. 18, figs. 1-10; *Neuropteris*-like foliage; Carboniferous (Culm); Germany.

NEURODONTOPTERIS Henry Potonie, 1893.

Neurodontopteris auriculata (Brongniart) Henry Potonie, 1893a, p. 12. For *Neuropteris auriculata* Brongniart, 1830 (1828a-38), p. 236, pl. 66; Upper Carboniferous; St.-Étienne, France.

NEUROGANGAMOPTERIS Zalesky, 1918.

Neurogangamopteris cardiopteroides (Schmalhausen) Zalesky, 1918, p. 48, pl. 2, fig. 1; pl. 2, figs. 7, 8, 10, 11, 13, 14; pl. 4, figs. 1, 2; pinnule, said to combine characters of *Neuropteris* and *Gangamopteris*; Permian; Tarbagatai, Russia.

NEUROPHYLLUM Kon'no, 1941.

Neurophyllum koreanicum Kon'no, 1941, p. 24, pls. 1, 2; foliage and cones, compared with *Phyllothea* and *Asterocalamites*; Jido series, Lower Permian; Taedong, South Helando, Korea.

NEUROPTERIDIUM Schimper, 1879.

Neuropteridium grandifolium Schimper, in Schimper and Schenk, 1879 (1879-90), p. 117, fig. 90; neuropterid pinnule; Lower Triassic.

NEUROPTERIS (Brongniart) Sternberg, 1825.

Neopteris heterophylla (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xvii. For *Filicites* (*Neopteris*) *heterophyllus* Brongniart, 1822, p. 233, pl. 2, fig. 6. [When first used (as a subgenus of *Filicites*), Brongniart spelled this name with a "v"; it was changed to a "u" (*Neopteris*) by Sternberg who gave it generic rank for the first time.]

NEUROPTEROCARPUS (Grand'Eury) Seward, 1917.

Neuropterocarpus kidstoni (Arbor) Seward, 1917, p. 114, fig. 422; a name for seeds attached to *Neopteris* foliage. See *Neuropterocarpus* sp. Grand'Eury, 1904, p. 785 (footnote).

NEUROPTEROMEDULLOSA Lotsy, 1909.

Neopteromedullosa stellata (Cotta) Lotsy, 1909, p. 724, fig. 509. For *Medullosa stellata* Cotta, 1832, p. 65. See note under *Pecopteromedullosa*.

NEURORAPHE Reid and Chandler, 1933.

Neuroraphe obovatum Reid and Chandler, 1933, p. 491, pl. 28, figs. 37-42; seed, incertae sedis; London Clay, Eocene; Minster, Kent, England.

NEUROSPERMUM E. A. N. Arber, 1914.

Neurospermum kidstoni E. A. N. Arber, 1914, p. 93, pl. 8, fig. 47; seed (named for seeds previously shown by Kidston to be borne on foliage of *Neopteris heterophylla*); Middle Coal Measures, Upper Carboniferous; Clays Croft, Cosely, South Staffordshire, England.

NEUROSPHENOPTERIS Zalesky, 1907.

Neurospenopteris bohdanowiczii Zalesky, 1907, p. 69. For *Sphenopteris bohdanowiczii* Zalesky, 1907, p. 65, pl. 2, fig. 2; fernlike foliage; Carboniferous; Dombrowa, Russia.

NEUROSPORANGIUM Debey and Ettingshausen, 1859.

Neurosporangium foliaceum Debey Ettingshausen 1859a, p. 190, pl. 1, fig. 5; alga; Cretaceous; Aachen, Rhenish Prussia.

NEVROPTERIS.

See *Neopteris*.

NEVROSPERMUM Paul Bertrand, 1913.

Nevospermum heterophyllae Paul Bertrand, 1913, p. 124, fig. 2; Bertrand creates this genus for seeds borne on *Neopteris* foliage; three species are recorded, the one cited here being the only one illustrated.

NEWBERRYANA E. W. Berry, 1910.

Newberryana rigida (Newberry) E. W. Berry, 1910c, p. 254, Raritan formation, Upper Cretaceous; New Jersey. For *Hausmannia rigida* Newberry, 1895, p. 35, pl. 2, figs. 2, 3, 5.

NEWLANDIA Walcott, 1914.

Newlandia frondosa Walcott, 1914, p. 105, pl. 5, fig. 4; pl. 6, figs. 1-3; pl. 7, figs. 1, 2; alga; Beltian series, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

NIAYSSI Zalesky, 1937.

Palaeophytographica, Moskau-Leningrad, 1937b, p. 18 (not seen, cited in Gothan, 1942b, p. 135).

NIAZONARIA Radsechenko, 1933.

Acad. sci. U. R. S. S., Inst. géologique, 1933, Travaux, tome 3, p. 252 (not seen, cited in Gothan, 1942b, p. 135).

NICOLIA Unger, 1842.

Nicolia aegyptiaca Unger, 1842b, p. 177; wood; Tertiary; Egypt. See Unger, 1858, p. 214, pl. 1, figs. 1, 2.

NIDULITES Salter, 1851.

Nidulites favus Salter, in Murchison, 1851, p. 174, pl. 9, figs. 16, 17; plant?; Silurian; Pembrokeshire, Wales.

NILSSONIA Brongniart, 1825.

Nilssonia brevis Brongniart, 1825, p. 218, pl. 12, figs. 4, 5; cycadophyte foliage; Rhætic; Hoer, Sweden. For history of genus, see Nathorst, 1909a; see also Harris, 1941.

NILSSONIOPTERIS Nathorst, 1909.

Nilssoniopteris tenuinervis Nathorst, 1909a, p. 29, pl. 6, figs. 23-25; pl. 7, fig. 21; cycadophyte leaf; Jurassic; Cloughton Wyke, Yorkshire, England.

NIPADITES Bowerbank, 1840.

Nipadites umbonatus Bowerbank, 1840, pl. 1; palm fruit; Eocene; Sheppey, Kent, England. See Reid and Chandler, 1933, p. 118.

NIPANIOPHYLLUM Sahni, 1948.

Nipaniophyllum raoi Sahni, 1948, p. 52, fig. 1; *Taeniopteris*-like leaves borne on *Pentoxylon*; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

NIPANIORUHA Rao, 1947.

Nipanioruha granthia Rao, 1947, p. 389, pls. 1-6; petrified coniferous shoots, affinities with Podocarpaceae or Cupressineae; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

NIPANIOSTROBUS Rao, 1943.

Nipaniostrobus sahnii Rao, 1943a, p. 115, pls. 1-3, 5; petrified seed-bearing cone, Podocarpaceae?; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

NIPANIOXYLON Srivastava, 1944.

Nipanioxylon guptai Srivastava, 1944, p. 75, pl. 2, fig. 14; petrified stem closely related or actually referable to *Pentoxylon*; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India. See also Srivastava, 1937; 1946, p. 207; Sahnii, 1948.

NIPONOPHYLLUM Stopes and Fujii, 1910.

Niponophyllum cordaitiforme Stopes and Fujii, 1910, p. 16, pl. 3, figs. 14-16; petrified gymnospermous leaves; Upper Cretaceous; Hokkaido, Japan.

NIPPONOPHYCUS Yabe and Toyama, 1928.

Nipponophycus ramosus Yabe and Toyama, 1928, p. 142, pl. 18, figs. 1-6; pl. 19, figs. 1-4; pl. 23, figs. 2, 3; alga, Rhodophyceae; Torinosu limestone, Mesozoic; Tosa, Japan.

NODOPHYCUS Herzer, 1901.

Nodophycus thallyformis Herzer, 1901, p. 26, pl. 1, fig. 2; marine alga; Carboniferous; Marietta, Ohio.

NOEGGERATHIA Sternberg, 1822.

Noeggerathia foliosa Sternberg, 1822 (1820-38), p. 33, pl. 20; fern or cycad frond (see Seward, 1910, p. 428); Upper Carboniferous; Bohemia.

NOEGGERATHIAESTROBUS Ottokar Feistmantel, 1871.

Noeggerathiaestrobis bohemicus Ottokar Feistmantel, 1871, p. 59; Upper Carboniferous; Radnitz, Bohemia. See also Feistmantel, 1876a, p. 270, pl. 61, fig. 5.

NOEGGERATHIOPSIS Ottokar Feistmantel, 1879.

Noeggerathiopsis hislopi (Bunbury) Ottokar Feistmantel, 1879, p. 23, pl. 19, figs. 1-6; pl. 20, fig. 1; Karharbari beds, Lower Gondwana; Domahnj, India.

NOEGGERATHIOSTROBUS Němejč, 1928.

Naeggerathiostrobus bohemicus Němejč, 1928, p. 53, pl. 1, figs. 2-7; pl. 2, figs. 5-8; Carboniferous; central Bohemia.

NOEOPTERIS Janssen, 1940.

Nocopteris asymmetrica Janssen, 1940, p. 97, pl. 25, fig. 3; fern stem impression; Pennsylvanian; Mazon Creek, Ill.

NORDENSKIOLDIA Heer, 1870.

Nordenskioldia borealis Heer, 1870, p. 65, pl. 7, figs. 1-13; fruit, Tiliaceae?; Miocene; Kings Bay, Spitzbergen.

NORIMBERGIA Gothan, 1914.

Norimbergia bravnii (Goepfert) Gothan, 1914, p. 19, pl. 18, figs. 6-8; fertile fern frond, Schizaeaceae; Rhaetic; Nürnberg, Germany.

NORINIA Halle, 1927.

Norinia cucullata Halle, 1927, p. 218, pl. 56, figs. 8-12; cupule?; Upper Shihhotse series, Paleozoic; Ch'en-chia-yu, central Shansi, China.

NOSTOCITES Maslov, 1929.

Nostocites problematica Maslov, 1929, p. 122, pl. 70, fig. 8; Carboniferous; Donets Basin, Russia.

NOTHOFAGOXYLON Gothan, 1908.

Nothofagoxylon scalariforme Gothan, 1908, p. 20, pl. 2, figs. 14-18; wood, compared with *Nothofagus* (Fagaceae); Tertiary; Seymour Island, Antarctic Ocean.

NOTHOPTERIS C. F. W. Braun, 1847.

Nothopteris mysteriosa C. F. W. Braun, 1847, p. 87; nom. nud.

NOTOSCHIZAEA Graham, 1934.

Notoschizaea robusta Graham, 1934, p. 453, figs. 1-5; pl. 8, fig. 26; petrified sporangia, Zygopteridaceae; upper McLeansboro group, Pennsylvanian; Calhoun coal mine, Richland County, Ill.

NOTOTHYRITES Cookson, 1947.

Notothyrites setiferus Cookson, 1947b, p. 209, pl. 11, figs. 1-6; ascomata, Microthyriaceae; late Oligocene; Kerguelen Island near Port Jeanne d'Arc, South Indian Ocean.

NUBECULARITES Maslov, 1937.

Nubecularites polymorphus Maslov, 1937b, p. 345, pl. 4, fig. 1; calcareous alga; Middle Cambrian; Vvedenskoye, Russia.

NUCELLANGIUM H. N. Andrews, 1949.

Nucellangium grabrum (Darrah) H. N. Andrews, 1949, p. 491, pls. 35-39; sporangia of uncertain affinities, some showing gemma-type reproductive tissue?; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

NULLIPORITES Heer, 1865?

Nulliporites hechtigensis (Quenstedt) Heer, 1865, p. 140, pl. 9, figs. 18, 19.

NUMMULOSPERMUM Walkom, 1921.

Nummulospermum bowense Walkom, 1921, p. 290, pl. 21; seed, associated with *Glossopteris*, "Permo-Carboniferous"; Three-Mile Creek, Bowen, Queensland.

NYCTAGINITES E. W. Berry, 1938.

Nyctaginites ellipticus E. W. Berry, 1938, p. 72, pl. 17, figs. 1, 2; leaf, Nyctaginaceae; Tertiary; Río Pichileufu, Argentina.

NYCTOMYCES Unger, 1841.

Nyctomyces antediluvianus Unger, 1841 (1841-47), p. 3, pl. 1, fig. 3; fungus mycelium; Miocene; Gleichenberg, Styria.

NYGMITES Mägdefrau, 1937.

Nygmites solitarius (Hagenow) Mägdefrau, 1937, p. 56.

NYMPHAEITES Sternberg, 1825.

Nymphaeites arethusae (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xxxix. For *Nymphaea arethusae* Brongniart, 1822, p. 332, pl. 6, fig. 9; Tertiary; fruit, Nymphaeaceae; Tertiary; Lonjumeau near Paris, France.

NYMPHAEOPSIS Kräusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 39 (not seen, cited in Gothan, 1942b, p. 136).

NYSSIDIDIUM Heer, 1870.

Nyssidium ekmani Heer, 1870, p. 62, pl. 15, figs. 1-5, 7; fruit, Araleaceae; Miocene; Cape Staratschin, Spitzbergen.

NYSSITES Geyler, 1887.

Nyssites obovatus (Weber) Geyler, 1887b, p. 162. For *Nyssa obovata* Weber, 1851, p. 184, pl. 20, fig. 11; Oligocene; Friesdorf, Rhenish Prussia. See also Geyler and Kinkel, 1887, p. 28, pl. 3, figs. 1-6.

NYSSOIDITES Thiergart?, 1950.

Nyssoidites rodderensis Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 59, pl. B, fig. 49; pollen, Nyssaceae?; Miocene; Chatt-Aquitain, Germany.

NYSTROEMIA Halle, 1927.

Nystroemia pectiniformis Halle, 1927, p. 221, pl. 59; seed-bearing organ and microsporangia, Pteridospermae?; Upper Shihhotse series, Paleozoic; Ch'en-chiauy Valley, central Shansi, China.

O

OCHROSELLA Reid and Chandler, 1933.

Ochrosella ovalis Reid and Chandler, 1933, p. 480, pl. 27, figs. 30, 31; fruit, Apocynaceae; London Clay, Eocene; Minster, Kent, England.

OCHROSOIDEA Reid and Chandler, 1933.

Ochrosoidea sheppeyensis Reid and Chandler, 1933, p. 477, pl. 27, figs. 15-29; fruit, Apocynaceae; London Clay, Eocene; Sheppey, Kent, England.

OCHTHODOCARYON Mueller, 1877.

Ochthodocaryon wilkinsonii Mueller, 1877a (1877-79), p. 178, fruit; Tertiary; New South Wales. See also Mueller, 1879 (1877-79), p. 171, pl. 4, figs. 1, 2.

OCOTEOXYLON Schuster, 1908.

Ocotoxylon ligurinum Schuster, 1908, p. 149, pl. 2, figs. 1-5; wood, Lauraceae; Eocene; Tegern Lake, Bavaria.

ODONTOCARYON Mueller, 1873.

Odontocaryon macgregori Mueller, 1873 (1871-82), p. 41, pl. 6, figs. 5-8; Pliocene; Nintingbool, Victoria.

ODONTOPTERIS Brongniart, 1825.

Odontopteris brardii Brongniart, in Sternberg, 1825 (1820-38), Tentamen, p. xxi. For *Filicites brardii* Brongniart, 1822, p. 234, pl. 2, fig. 5. See also Brongniart, 1828a-38, p. 252, pls. 75, 76. In the Sternberg reference the specific name is spelled *berardi* which is apparently a mistake, for Brongniart originally (1822) employed *brardii* and retains this in 1828-38.

ODONTOPTEROCARPUS Lubièrre, 1930.

Odontopterocarpus oblongus Lubièrre, 1930, p. 323; seeds; Carboniferous; St.-Étienne, France.

ODONTOSORITES Kobayashi and Yosida, 1944.

Odontosorites heerianus (Yokoyama) Kobayashi and Yosida, 1944, p. 267, 269, pl. 28, figs. 6, 7; fern foliage, compared with *Odontosoria*; Jurassic; Ryokusin, Manchuria.

OIDITES Meschinelli, 1892.

Oidites moniliformis (Menge and Goepfert) Meschinelli, in Saccardo, 1892, p. 789; fungus, Hyphomycetaceae. See also Meschinelli, 1898, p. 77.

IDOSPORA Williamson, 1878.

Oidospora anomala Williamson, 1878, p. 364, pl. 25, fig. 102 (figured but not described); Carboniferous.

OLDHAMIA Forbes, 1854.

Oldhamia antiqua Forbes, in Murchison, 1854, p. 32, fig. 1; plant?; Cambrian; Bray Head in Wicklow, Ireland.

OLEAECARPUS Menzel, 1913.

Oleaecarpus germanicum Menzel, 1913, p. 60, pl. 5, figs. 25, 26; fruit, Oleaceae; Tertiary (Braunkohle); Germany.

OLEANDRIDIDIUM Schimper, 1869.

Oleandrididium vittatum (Brongniart) Schimper, 1869 (1869-74), p. 607. For *Taeniopteris vittata* Brongniart, 1828a-38, p. 263, pl. 82, figs. 1-4; now believed to be foliage of *Williamsontella*. See Thomas, H. H., 1915.

OLEARIAPHYLLITES Hector, 1880.

Oleariaphyllites whaurangi Hector, 1880, p. 49; nom. nud.

OLEINITES Cookson, 1947.

Oleinities willisii Cookson, 1947a, p. 183, pl. 8, figs. 1-5; mummified leaves, probably Oleaceae; Oligocene-Miocene; Yalourn, Victoria.

OLEIPHYLLUM Conwentz, 1886.

Oleiphyllum boreale Conwentz, 1886, p. 122, pl. 12, figs. 12-14; leaf, in amber, Oleaceae; early Tertiary; West Prussia.

OLERACITES Saporta, 1862.

Oleracites convolvuloides Saporta, 1862, p. 241, pl. 7, fig. 8; leaf, Oleaceae; Tertiary; France.

OLFERSITES Guembel, 1859.

Olfersites dichotomus Guembel, 1859b, p. 161. For *Schizeites dichotomus* Guembel, 1859, p. 101, pl. 8, fig. 7; compared with *Olfersia peltata*; Permian (Rothliegenden); Erbendorf, Bavaria.

OLIGOCARPIA Goeppert, 1841.

Oligocarpia gutbieri Goeppert, 1841b, p. 57, pl. 4, figs. 1, 2; fertile fern frond, probably Gleicheniaceae; Carboniferous; Saxony.

OLIGOPORELLA Pia, 1912.

Oligoporella pilosa Pia, 1912, p. 42, pl. 4, figs. 1-8; alga, Siphonaeae Verticillatae; Triassic; Dalmatia, Austria-Hungary.

OMMATOXYLON Hartig, 1848.

Ommatoxylon germari Hartig, 1848a, p. 172; wood; Tertiary; Germany.

OMPHALOMELA Germar, 1846.

Omphalomela scabra Germar, 1846, p. 29, pl. 3, fig. a; incertae sedis; Triassic (Keuper); Badeleben, Thuringia.

OMPHALOPHLOIOS David White, 1898.

Omphalophloios cyclostigma David White, 1898, p. 336, pls. 20-23; arborescent lycopod stem impression; Pennsylvanian; Clinton, Henry County, Mo.

ONCOBYRSELLA J. H. Johnson, 1937.

OncobyrSELLA coloradensis J. H. Johnson, 1937, p. 1235, pl. 2, figs. 3, 4; compared with *Oncobyrssa*, Cyanophyceae; Antero formation, Oligocene; Park County, Colo.

ONCODENDRON Eichwald, 1860.

Oncodendron mirabile Eichwald, 1860, p. 213, pl. 16, figs. 7, 8; pl. 21, fig. 8; lycopod? stem; Upper Carboniferous; Bjelebi, Orenbourg, Russia. Earlier citation: Eichwald, in Mercklin, 1856, p. 80; nom. nud.

ONCOPTERIS Dormitzer, 1853.

Oncopteris nettwalli Dormitzer, in Krejčí, 1853, p. 28, pl. 2; Cretaceous (Cenomanian); Kaunitz, Bohemia. See also Posthumus, 1931.

ONCYLOGONATUM König, 1827.

Oncylogonatum carbonarium König, in Murchison, 1827, p. 300, pl. 32 (1829); compared with *Equisetum*; Jurassic; Brora, Sutherlandshire, Scotland.

ONCHIOPSIS.

Apparently misprint for *Onychiopsis*, in Sze, 1945, p. 46.

ONOCLEITES Jaeger, 1827.

Onocleites lanceolatus Jaeger, 1827, p. 34, pl. 6, fig. 8; fern? leaf fragment; Triassic (Keuper); Esslingen, Württemberg.

ONTHEANTHUS Ganju, 1944.

Ontheanthus polyandra Ganju, 1944, p. 77, pl. 2, figs. 17-20; male fructification, Bennettitales; Jurassic; Onthea, Rajmahal Hills, India.

ONTHEODENDRON Sahni and A. R. Rao, 1931.

Ontheodendron florini Sahni and Rao, 1931, p. 200, pls. 15, 16; cone, Coniferales; Jurassic; Rajmahal Hills, India.

ONTHEOSTROBUS Ganju, 1944.

Ontheostrobus sessilis Ganju, 1944, p. 77, pl. 3, figs. 21-24; gymnospermous seed-bearing fructification, possibly related to Bennettitales; Jurassic; Onthea, Rajmahal Hills, India.

ONYCHIOPSIS Yokoyama, 1889.

Onychiopsis elongata (Geyler) Yokoyama, 1889, p. 27, pl. 2, figs. 1-3; pl. 3, fig. 6d; pl. 12, figs. 9, 10; fern, Polypodiaceae?; Jurassic; Tetorigawa, Japan. See also Seward, 1894, p. 40.

OOCHYTRIUM Renault, 1895.

Oochytrium lepidodendri Renault, 1895c, p. 160, pl. 154, figs. 15, 16; fungus spores; Carboniferous (Culm); Esnost, France.

OOTHECA Nathorst, 1914.

Ootheca nordenskiöldii Nathorst, 1914, p. 19, pl. 15, fig. 83; pteridosperm sporangia?; Palaeozoic; Spitzbergen.

OPEGRAPHITES Debey, 1859.

Opegraphites striatopunctatus Debey, in Debey and Ettingshausen, 1859a, p. 211, pl. 3, fig. 7; lichen?; Lower Cretaceous; Aachen, Rhenish Prussia.

OPHIGLOSSITES Massalongo, 1850.

Ophioglossites eocena Massalongo, 1850, p. 50; fern; Eocene; Monte Bolca; Italy.

OREODOXITES Goeppert, 1864.

Oreodoxites martianus Goeppert, 1864, p. 147, pl. 26, fig. 5; seed; Permian; Braunau, Bohemia.

ORESTOVIA Zalessky, 1931.

Acad. sci. U. R. S. S. Bull., 1931, p. 402 (not seen, cited in Gothan, 1942b, p. 136).

ORIOPORELLA (Munier-Chalmas) Morellet and Morellet, 1922.

Orioporella briardi Munier-Chalmas, in Morellet and Morellet, 1922, p. 28, pl. 10, figs. 47, 48; alga, Dasycladaceae; Eocene (Montien); Mons, Belgium. Generic name cited in Munier-Chalmas, 1877, p. 817; nom. nud.

ORMOXYLON Dawson, 1871.

Ormoxyylon erianum Dawson, 1871, p. 14, pl. 1, figs. 10-15; woody stem of cordaitan affinities; Devonian; Schohari County, N. Y.

ORNOXYLON Felix, 1882.

Ornoxyylon fraxinoides Felix, 1882a, p. 35; wood, dicotyledon.

ORPHANIDESITES Caspary, 1881.

Orphanidesites primaevus Caspary, 1881, p. 29; fruit; Ericaceae; Tertiary.

ORTHOGONIOPTERIS E. B. Andrews, 1875.

Orthogoniopteris clara E. B. Andrews, 1875, p. 419, pl. 50, fig. 1; foliage resembling *Tacniopteris*; Pennsylvanian; near Rushville, Perry County, Ohio.

ORTHOPORITES Schleiden, 1855.

Orthoporites apeltianus Schleiden, in Schmid and Schleiden, 1855, p. 27. Tertiary (Braunkohle); Haering, Tirol, Austria.

ORTONELLA Garwood, 1914.

Ortonella furcata Garwood, 1914, p. 266, pl. 20, figs. 1-4; alga?; Lower Carboniferous; Eskrigg Wood near Summerlands, Westmoreland, England.

ORVILLEA Lang, 1945.

Orvilica brasiliensis (Dawson) Lang, 1945, p. 546, pls. 22-25; Upper Devonian; Brazil. For *Protosalvinia brasiliensis* Dawson, in Chicago Acad. Sci. Bull., 1886, v. 1, p. 115, figs. 1, 8, 9.

OSAGIA Twenhofel, 1919.

Osagia incrustata Twenhofel, 1919, p. 352, fig. 5; alga; Foraker limestone member; Pennsylvanian; Ekler Canyon, Cowley County, Kans.

OSCILLATORITES Zalesky, 1927.

Oscillatorites bertrandi Zalesky, 1927a, p. 98, pl. 4, fig. 8; alga, compared with *Oscillatoria*; Carboniferous; Simbirsk, Russia.

OSMUNDIA R. M. Johnston, 1894.

Osmundia tasmanica R. M. Johnston, 1894, p. 176, pl. 1, fig. 2; fern leaflets; lower Tertiary; Glenora, Tasmania.

OSMUNDITES Jaeger, 1827.

Osmundites pectinatus Jaeger, 1827, p. 29, pl. 7, figs. 1-5; cycadophyte foliage, name changed to *Pterophyllum jaegeri* by Brongniart, 1828b, p. 100.

OSMUNDITES Unger, 1854.

Osmundites schemnicensis Unger, 1854a, p. 143, pl. 1; petrified rhizome, Osmundaceae; Tertiary; Ilia, near Schemnitz, Hungary. See also Kidston and Gwynne-Vaughan, 1907-10; Posthumus, 1931.

OSMUNDOPHYLLUM Velenovsky, 1889.

Osmundophyllum crctaceum Velenovsky, 1889, p. 6, pl. 2, fig. 21; fern frond fragment; Upper Cretaceous; Lipenec, Bohemia.

OSMUNDOPSIS Harris, 1931.

Osmundopsis sturii (Raciborski) Harris, 1931a, p. 136; fertile pinnae compared with *Osmunda*; Jurassic; Cracow, Poland. For *Osmunda sturii* Raciborski, 1890, p. 2, pl. 1, figs. 1-5. See also Harris, 1931b, p. 48.

OSTERITES.

Error for *Zosterites*, in Brongniart, Alexander, 1829, p. 409.

OTIDOPHYTON David White, 1905.

Otidophyton hymenophylloides David White, in Smith and White, 1905, p. 47, pl. 2, fig. 3; fern leaf fragment; Upper Devonian; Perry, Maine.

OTOPTERIS Lindley and Hutton, 1834.

Otopteris obtusa Lindley and Hutton, 1834 (1831-37), p. 128, pl. 128; cycadophyte leaf; Lower Jurassic (Lias); Membury, near Axminster, England.

OTOPTERIS Sauveur, 1848.

Otopteris cycloidea Sauveur, 1848, p. 1, pl. 26, figs. 1, 2, no description given; cyclopterid leaflet; Upper Carboniferous; Belgium.

OTOZAMITES Braun, 1842.

The following is suggested as a type species: *Otozamites obtusus* (Lindley and Hutton) Brongniart, 1849, p. 104. For *Otopteris obtusa* Lindley and Hutton, 1834 (1831-37), p. 129, pl. 128; cycadophyte foliage; Jurassic; England. See also Seward, 1904, pl. 1, figs. 1, 3, 5.

OTTOKARIA Zeiller, 1902.

Ottokaria bengalensis Zeiller, 1902, addenda facing p. 1; pl. 4, figs. 9, 10. For *Feistmantelia bengalensis* Zeiller, 1902, p. 34. See also Seward, 1917, p. 139; Seward and Sahni, 1920, p. 12; and Thomas, 1921, p. 285.

OTTOZAMITES Twenhofel, 1919.

Ottosia laminata Twenhofel, 1919, p. 350, figs. 3, 4; alga; Crouse limestone member. Permian; Osage County, Okla.

OUROSTROBUS Harris, 1935.

Ourostrobos nathorsti Harris, 1935, p. 116, pls. 23, 27; seed-bearing cone, incertae sedis; *Thaumatopteris* zone; Rhaetic; Scoresby Sound, east Greenland.

OVALITES Lomax, 1911.

Ovalites resinosus Lomax, 1911, p. 126, pl. 5, fig. 18; pl. 6, fig. 21; pl. 7, fig. 23; a name assigned to oval resinous bodies found in coal; Arley coal seam and others; Upper Carboniferous; Atherton, Lancashire, England.

OVOPTERIDIUM Behrend, 1909.

Ovopteridium schumannii (Stur) Behrend, 1909, p. 677, pl. 17, fig. 10; sphenopterid foliage; Upper Carboniferous.

OVOPTERIS Henry Potonie, 1893.

Ovopteris cremeriana Henry Potonie, 1893b, p. 39, pl. 3, fig. 1; sphenopterid foliage; Permian; Ilmenau, Prussian Saxony.

OVULARITES Whitford, 1916.

Ovularites barbouri Whitford, 1916, p. 85, figs. 1-5; fungus; Cretaceous; Rose Creek, Jefferson County, Nebr.

OVULITES Lamarck, 1816.

Ovulites margaritula Lamarck, 1816, p. 194; alga?; Eocene; near Paris, France. First species described after 1820 appears to be: *Ovulites pavantina* (d'Archiac) d'Orbigny, 1850, p. 405. First species illustrated after 1820 appears to be: *O. elongata* Lamarck, in Schwager, 1883, p. 146, pl. 29, fig. 22. See discussion in Seward, 1898, p. 161; Hirmer, 1927, p. 60.

OXALIDITES Caspary, 1886.

Oxalidites brachysepalus Caspary, 1886, p. 7; fruit, Oxalidaceae; Tertiary; Samland, Baltic Prussia. First species illustrated: *O. averrhoides* Conwentz, 1886, p. 70, pl. 8, figs. 1-3.

OXYCARPIA Trautschold, 1874.

Oxycarpia bifaria Trautschold, 1874, p. 132, pl. 3; Tertiary; Kamuschin, Russia.

P

PACHYPHLOEUS Goepfert, 1836.

Pachyphloeus tetragonus Goepfert, 1836, p. 433, pl. 43; aborescent lycopod stem impression; Lower Carboniferous; Landshut, Falkenberg, Silesia.

PACHYPHYLLUM Lesquereux, 1854.

Pachyphyllum fimbriatum Lesquereux, 1854, p. 421; fernlike foliage; Pennsylvanian; Pennsylvania. See Lesquereux, in Rogers, 1858, p. 863, pl. 8, fig. 2.

PACHYPTERIS Brongniart, 1829.

Pachypteris lanceolata Brongniart, 1829 (1828a-38), p. 167, pl. 45, fig. 1. Generic name cited in Brongniart, 1828b, p. 50. See Seward, 1910, p. 550.

PACHYSPERUM Reid and Chandler, 1933.

Pachyspermum quinqueloculare Reid and Chandler, 1933, p. 419, pl. 22, figs. 1-7; fruit, Lythraceae; London Clay, Eocene; Sheppey, Kent, England.

PACHYSPORANGIUM Salter, 1880.

Pachysporangium pilula Salter, 1880, p. 463; nom. nud.

PACHYTESTA Brongniart, 1874.

Pachytesta incrassata Brongniart, 1874, p. 262, pl. 22, fig. 4; silicified seed; Upper Carboniferous; St.-Étienne, France.

PACHYTHECA Hooker, 1861.

Pachythea sphaerica Hooker, in Salter, 1861, p. 162. Devonian; Malvern, Scotland. Previously described by Hooker, 1852, p. 12, but not named. See also Harris, W. H., 1884, p. 28-32, figs. 21-23; and Kidston and Lang, 1925.

PAGIOPHYLLITES Tuzson, 1811.

Pagiophyllites keuperianus (Unger) Tuzson, 1911, p. 30, fig. 5.

PAGIOPHYLLUM Heer, 1881.

Pagiophyllum circincum (Saporta) Heer, 1881, p. 11, pl. 10, fig. 6; coniferous twigs and foliage; Jurassic (Malm); Sierra de San Luiz, Portugal.

PAIKHOIA Zalesky, 1936.

Paikhoia tchernovi Zalesky, 1936b, p. 237, figs. 1-5; lycopod leaf bases; Permian; Russia.

PALACKYA Crie, 1889.

Palackya philippinensis Crie, 1889a, p. 87, pl. 17, figs. 1, 2; wood, dicotyledon; Pliocene; San Juan del Monte, Manila, Philippine Islands.

PALAEACHLYA Duncan, 1876.

Palaeachlya perforans Duncan, 1876, p. 210, pl. 16; alga or fungus?, in coral; Silurian.

PALAEAELECTRYON Reid and Chandler, 1933.

Palaeaelectryon spirale Reid and Chandler, 1933, p. 363, pl. 17, figs. 13-19; seed, Sapindaceae; London Clay, Eocene; Sheppey, Kent, England.

PALAEALLOPHYLLUS Reid and Chandler, 1933

Palaeallophyllus ovoideus Reid and Chandler, 1933, p. 360, pl. 17, figs. 1-7; seed, Sapindaceae; London Clay, Eocene; Sheppey, Kent, England.

PALAEANTHUS Newberry, 1895.

Palaeanthus problematicus Newberry, 1895, p. 125, pl. 35; fructification, Bennettiales?; Amboy clay, Upper Cretaceous; New Jersey.

PALAEEUCHARIDIUM Reid and Chandler, 1933.

Palaeucharidium cellulare Reid and Chandler, 1933, p. 426, pl. 23, figs. 1-4; fruit, Onagraceae; London Clay, Eocene; Minster, Kent, England.

PALAEOALGITES Weyland and Budde, 1932.

Palaeoalgites kräuseli Weyland and Budde, 1932, p. 272, figs. 20, 21; Devonian; near Douglstown, Gaspé, Canada.

PALAEOASTER Knowlton, 1917.

Palaeoaster inquirenda Knowlton, 1917, p. 278, pl. 49, figs. 5, 6; incertae sedis; Vermejo formation, Cretaceous; Alkali Gap, Canon City, Colo.

PALAEOAVENA Ettingshausen, 1890.

Palaeoavena stipaeformis Ettingshausen, 1890, p. 77, pl. 2, figs. 1-12; inflorescence fragments, Gramineae; Miocene; Schoenegg, Styria.

PALAEOBROMELIA Ettingshausen, 1852.

Palaeobromelia jugleri Ettingshausen, 1852b, p. 3, pl. 1, fig. 1; pl. 2, figs. 1-3; not a plant, see R. W. Brown, 1950.

PALAEOCARYA Saporta, 1873.

Palaeocarya atavia Saporta, 1873a, p. 101, pl. 15, figs. 36-39; involucre, Juglandaceae; Eocene; Aix, Provence, France.

PALAEOCASSIA Ettingshausen, 1867.

Palaeocassia angustifolia Ettingshausen, 1867, p. 261, pl. 3, figs. 6, 7; leaf, Papilionaceae; Cretaceous (Cenomanian); Niederschoena, Saxony.

PALAEOCEDRUS Unger, 1842.

Palaeocedrus exstinctus Unger, in Endlicher, 1842, p. 26; abetinean cone; Tertiary. Brief generic description only. See also Goeppert, 1850, p. 210.

PALAEOCHARA Massalongo, 1851.

Palaeochara rigida Massalongo, 1851, p. 44; Characeae; Eocene; Monte Bolca, Italy. Apparently given as a new name for *Chondrites rigidus* Massalongo, 1850, p. 36.

PALAEOCHARA Bell, 1922.

Palaeochara acadica Bell, 1922, p. 160, pl. 1, figs. 3-9; oogonium, Charophyte; Pennsylvanian; St. Rose mine, Inverness County, Nova Scotia.

PALAEACHLYA Duncan, 1876.

Palaeachlya perforans Duncan, 1876, p. 210, pl. 16; alga?, compared with *Achlya* and found in Silurian corals; Silurian; Canada.

PALAEOCHONDrites (Schimper) Saporta, 1882.

Palaeochondrites fruticulosus (Goeppert) Saporta, 1882, p. 35, pl. 5, figs. 2-3; alga; Silurian?; Glanzky near Vailhan, France.

PALAEOCHORDA M'Coy, 1848.

Palaeochorda minor M'Coy, in Sedgewick, 1848, p. 225; alga; upper Silurian; Cumberland and Westmoreland, England.

PALAEOCLADUS Ettingshausen, 1887.

Palaeocladus cuneiformis Ettingshausen, 1887a, p. 93, pl. 8, fig. 33; foliage shoot, Taxineae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

PALAEOCLADUS Pia, 1920.

Palaeocladus mediterraneus Pia, 1920, p. 118, pl. 6, figs. 1-5; alga, Siphonaceae Verticillatae; Jurassic; Monte Potina, Italy.

PALAEOCODIUM Chiarugi, 1947.

Palaeocodium saharianum Chiarugi, 1947, p. 129, pl. 9; alga, Codiaceae; Lower Carboniferous; Uadi near Gebel Auénat, Libyan Desert, Egypt.

PALAEOCYCAS Florin, 1933.

Palaeocycas integer (Nathorst) Florin, 1933, p. 32, pl. 1, figs. 1, 2; pl. 2, figs. 1-3; pl. 3, figs. 1-3; cycad megasporophyll; Rhaetic.

PALAEOCYPARIS Saporta, 1872.

Palaeocyparis expansus (Sternberg) Saporta, 1872, p. 1056. For *Thuites expansus* Sternberg, 1823 (1820-38), p. 39, pl. 38; Jurassic; Stonesfield, England.

PALAEODASYCLADUS Pia, 1927.

Palaeodasycladus mediterraneus Pia, in Hirmer, 1927, p. 79, fig. 62; alga, Dasycladaceae; Lower Jurassic (middle Lias).

PALAEODENDRON Saporta, 1862.

Palaeodendron gypsophilum Saporta, 1862, p. 250, pl. 7, fig. 9; leaf, Proteaceae; Tertiary; St.-Zacharie, France.

PALEODICTYON Heer, 1865.

Palaeodictyon singulare Heer, 1865 (1864-65), p. 245, pl. 10, fig. 10; alga?; Eocene; Switzerland.

PALAEODICTYOTA Whitfield, 1902.

Palaeodictyota ramulosa (Spencer) Whitfield, 1902, p. 399, pl. 53; marine alga; Niagara Group, Silurian; Lockport, N. Y.

PALAEOGLEICHENIA Lenthardt, 1901.

Palaeogleichenia gracilis (Heer) Lenthardt, 1901, p. 128. For *Pecopteris gracilis* Heer, 1865 (1864-65), p. 54, pl. 2, fig. 1.

PALAEOGONIOPTERIS Koidzumi, 1936.

Palaeogoniopteris mengkarangensis (Gothan and Jongmans) Koidzumi, 1936, p. 134. For *Gigantopteris mengkarangensis* Gothan and Jongmans, 1935, Jaarb. mijnwezen Nederlandisch-Indië, 1930, Verh., boekdeel 59, p. 143, p. 47, figs. 2-4; Stephanian, Carboniferous; Djambi, Sumatra.

PALAEOGREWIA Massalongo, 1851.

Palaeogrewia dejoyeae Massalongo, 1851, p. 182; Tiliaceae; Tertiary; Italy.

PALAEOHALIDRYS Gardner, 1924.

Palaeohalidrys californica Gardner, 1924, p. 362, pl. 25; alga, compared with *Halidrys* (Fucaceae); Miocene (in diatomaceous earth); Los Angeles (Bairdstown), Calif.

PALAEOHYPNUM Steere, 1946.

Palaeohypnum arnoldianum Steere, 1946, p. 315, pls. 1, 2; moss, Bryales Pleurocarpi; Miocene; Carter Creek, near Finley McKenzie ranch, Malheur County, Oreg.

PALAEOKEURA Massalongo, 1853.

Palaeokeura pellegriniana Massalongo, 1853d, p. 206, pls. 1-4; Pandanaceae; Tertiary; Italy.

PALAEOLEPIS Saporta, 1894.

Palaeolepis bicornuta Saporta, 1894, p. 179, pl. 33, fig. 4c; cone scales, Coniferales; Cretaceous (Albian); Buarcos, Portugal.

- PALAEOLOBIUM** Unger, 1850.
Palaeolobium haeringianum Unger, 1850a, p. 490; fruit, Leguminosae; Eocene; Haering, Tirol, Austria. *See also* Unger, 1851, p. 186, pl. 62, figs. 8-10.
- PALAEOMYCES** Renault, 1896.
Palaeomyces gracilis Renault, 1896a, p. 439, figs. 88, 89; fungus; Upper Carboniferous; Esnost, France. [Meschinelli, 1898, p. 9, cites the genus "*Palaeomycites*, Renault." This is Meschinelli's change in spelling and should not be attributed to Renault as such; the only species cited is "*Palaeomycites gracilis* (Renault) Meschinelli."]
- PALAEOMYCITES.**
See Palaeomyces Renault.
- PALAEONITELLA** Pia, 1927.
Palaeonitella cranii (Kidston and Lang) Pia, in Hirmer, 1927, p. 91. For *Algites cranii* Kidston and Lang, 1921, p. 876, pl. 9, figs. 98-104; alga, probably Characeae; Old Red Sandstone, Middle Devonian; Muir of Rhynie, Aberdeenshire, Scotland.
- PALAEONYSSA** Reid and Chandler, 1933.
Palaeonyssa multilocularis Reid and Chandler, 1933, p. 431, pl. 23, figs. 11-15; endocarp, Nyssaceae; London Clay, Eocene; Sheppey, Kent, England.
- PALAEOPEDE** Etheridge, 1899.
Palaeopede whiteleggei Etheridge, 1899a, p. 127, pl. 23, figs. 1-4; *Nostoc*-like endophytic alga; "Permo-Carboniferous"; New South Wales.
- PALAEOPERONE** Etheridge, 1891.
Palaeoperone endophytica Etheridge, 1891, p. 97, pl. 7, fig. 2; spores?, found in coal; "Permo-Carboniferous"; New South Wales.
- PALAEOPHOENIX** Saporta, 1878.
Palaeophoenix aymardi Saporta, 1878a, p. 25, pls. 1, 2; pl. 3, figs. 2-4; Eocene; Brives near Puy-en-Velay, France.
- PALAEOPHYCUS** Hall, 1847.
Palaeophycus tubularis Hall, 1847, p. 7, pl. 2, figs. 1, 2, 4, 5; alga?; Silurian; New York.
- PALAEOPHYTOCRENE** Reid and Chandler, 1933.
Palaeophytocrene foveolata Reid and Chandler, 1933, p. 333; pl. 15, figs. 24-32; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.
- PALAEOPICEOXYLON** Kräusel, 1949.
Palaeopiceoxylon transiens (Shimakura) Kräusel, 1949, p. 127, 182; coniferous wood; Cretaceous; Japan. For *Piceoxylon transiens* Shimakura, 1937, p. 24, pl. 6, figs. 1-9.
- PALAEOPITYS** M'Nab, 1870.
Palaeopitys milleri M'Nab, 1870, p. 314; Devonian. *See also* Kidston and Lang, 1923b.
- PALAEOPORELLA** Stolley, 1893.
Palaeoporella variabilis Stolley, 1893, p. 138, pl. 7, figs. 1-5; siphonaceous alga?; Silurian; Holstein, Kiel, Prussia.
- PALAEOPOTAMOGETON** Knowlton, 1916.
Palaeopotamogeton florissanti Knowlton, 1916, p. 251, pl. 16, fig. 1; pl. 17, fig. 3; stems with leaves and fruits, Potamogetonaceae?; Oligocene; Florissant, Colo.
- PALAEOPTERIDIUM** Kidston, 1923.
Palaeopteridium reussi (Ettingshausen) Kidston, 1923a, p. 201, pl. 55, figs. 1-3; foliage similar to *Archaeopteris*; Westphalian, Upper Carboniferous.
- PALAEOPTERIS** Geinitz, 1855.
Palaeopteris schnorriana Geinitz, 1855, p. 32, pl. 35, fig. 8; fern? stem impression; Upper Carboniferous; Niedercainsdorf, Saxony. *See also* Posthumus, 1931.
- PALAEOPTERIS** Schimper, 1869.
Palaeopteris hibernica (Forbes) Schimper, 1869 (1869-74), p. 475, pl. 36; this genus changed to *Archaeopteris* (Dawson, 1871) because of the earlier use of *Palaeopteris* by Geinitz.
- PALAEOPYRUM** Schmalhausen, 1883.
Palaeopyrum incertum Schmalhausen, 1883, p. 293, pl. 31, figs. 3, 4; fruits, Gramineae; Eocene; Russia.
- PALAEORACHIS** Saporta, 1889.
Palaeorachis subgracilis Saporta, 1889, p. 46, pl. 8, fig. 1; inflorescence (axis only) of *Sabal*?; Eocene; Aix, Provence, France.
- PALAEORACHIS** Massalongo, 1858.
Palaeorachis rhyzoma Massalongo, 1858b, p. 750, Tertiary; Italy.
- PALAEORHODOMYRTUS** Reid and Chandler, 1933.
Palaeorhodomyrtus subangulata (Bowerbank) Reid and Chandler, 1933, p. 436, pl. 23; figs. 21-31; fruit, Myrtaceae; London Clay, Eocene; Sheppey, Kent, England.
- PALAEOSORDARIA** Sahni and H. S. Rao, 1943.
Palaeosordaria lagena Sahni and Rao, 1943, p. 46, pl. 3, figs. 22, 23; perithecia, Sordariaceae; Interrapian cherts, early Tertiary; Chhindwāra district, Central Provinces, India.
- PALAEOSPADIX** Saporta, 1886-91.
Palaeospadix girardoti Saporta, 1886-91, p. 260, pl. 270, fig. 3; pl. 271, fig. 9; palm spadix?; Jurassic; Châtelneuf, France.
- PALAEOSPATHE** Unger, 1845.
Palaeospathe sternbergii Unger, 1845 (1841-47), p. lxxi; wood, Aurantiaceae; Carboniferous; Swina, Bohemia. For *Spatha* (*Flabellaria*) *borassifoliae* Sternberg, 1820-38, pl. 41.

PALAEOSTACHYA C. E. Weiss, 1876.

The following is suggested as the type in view of the clear-cut diagnostic characters displayed: *Palaeostachya elongata* (Presl) C. E. Weiss, 1876, p. 108, pl. 15; articulate cone; Upper Carboniferous; Swina near Radnitz, Bohemia.

PALAEOSTROBUS Renger, 1866.

Palaeostrobus mirabilis (Corda) Renger, 1866, p. 137, pl. 1, fig. 1.

PALAEOTAXODIOXYLON Frentzen, 1916.

Palaeotaxodioxyton gruenwetersbachense Frentzen, 1916, p. 103, pl. 22; Triassic (Upper Bunter Sandstone); Gruenwetersbach, Baden.

PALAEOTAXUS Nathorst, 1908.

Palaeotaxus rediviva Nathorst, 1908a, p. 16, pl. 3, figs. 13-17; foliage and cone, Coniferales; Rhaetic; Skromberga, Sweden.

PALAEOTHALIA Squinabol, 1892.

Palaeothalia sanctaejustinae Squinabol, 1892, p. 57, pl. 21, fig. 2; pl. 29, fig. 7; leaf, Scitamineae; Tertiary; Santa Giustina, Italy.

PALAEOTHECIUM Saporta, 1888.

Palaeothecium ambiguum Saporta, 1888, p. 16, pl. 1, fig. 15; sporophyte of moss?; Eocene; Aix, Provence, France.

PALAEOTHRINAX Reid and Chandler, 1926.

Palaeothrinax mantelli Reid and Chandler, 1926, p. 80, pl. 5, figs. 1-5; palm leaf; Bembridge Marl, Oligocene; Isle of Wight, England.

PALAEOVITIS Reid and Chandler, 1933.

Palaeovitis paradoxa Reid and Chandler, 1933, p. 388, pl. 19, figs. 20-27; seed, Vitaceae; London Clay, Eocene; Warden Point, Kent, England.

PALAEOVITTARIA Ottokar Feistmantel, 1876.

Palaeovittaria kurzi Ottokar Feistmantel, 1876a, p. 368, pl. 19, figs. 3, 4; fern leaf, compared with *Vittaria* (Polypodiaceae); Damuda series, Gondwana System; Raniganj, India.

PALAEOWEICHSELIA Henry Potonie and Gothan, 1909.

Palaeoweichselia defrancei (Brongniart) Henry Potonie and Gothan, 1909, p. 4. For *Pecopteris defrancei* Brongniart, 1828a-38, p. 325, pl. 111; pl. 112, fig. 1.

PALAEOXYLON Hartig, 1848.

Palaeoxylon endlicheri Hartig, 1848a, p. 172; wood; Tertiary; Riestadt, Germany.

PALAEOXYLON Brongniart, 1849.

Palaeoxylon withami (Lindley and Hutton) Brongniart, 1849, p. 126. For *Pinites withami* Lindley and Hutton, 1831 (1831-37), p. 9, pl. 2; cordate wood; Carboniferous; Craigleith, Scotland.

PALAEOXYRIS Brongniart, 1828.

Not a plant; see Brown, R. W., 1950.

PALAEOZAMIA Endlicher, 1836.

Palaeozamia tazina (Lindley and Hutton) Endlicher, 1836 (1836-40), p. 72? First specific reference in Endlicher is to *Zamia tazina* Lindley and Hutton, 1835 (1831-37), p. 67, pl. 175.

PALAMOPHYLLUM Zalessky, 1912.

Palamophyllum cuneifolium (Kutorga) Zalessky, 1912, p. 38. For *Psygrophyl- lum cuneifolium* (Kutorga) Schimper, 1870 (1869-74), p. 194. For *Sphenopteris cuneifolia* Kutorga, 1838, p. 32, pl. 7, fig. 3.

PALEODICTYON Savi and Meneghini, 1851.

Paleodictyon strozzi Savi and Meneghini, 1851, p. 208; alga, affinities with *Hydrodictyon*?; Eocene; Tuscany, Italy. See also Silvestri, 1911; and Peruzzi, 1881, p. 7, pl. 1, fig. 8.

PALEOERIOCOMA Elias, 1942.

Paleoeriocoma hitchcocki Elias, 1942, p. 100, pl. 15, figs. 7, 8; grass hull; Ash Hollow formation, middle Pliocene; Beecher Island Post Office, Yuma County, Colo.

PALEOHEPATICA Raciborski, 1889.

Paleohepatica rostafinskii Raciborski, 1889, p. 136; Jurassic; Cracow, Poland. See Hirmer, 1927, p. 141, figs. 135, 136.

PALEOHILLIA Knowlton, 1895.

Paleohillia arkansana Knowlton, 1895, p. 387, figs. 1-3; stem with epidermis preserved, incertae sedis; Trinity division, Lower Cretaceous; 6 miles northeast of Center Point, Howard County, Ark.

PALEOMEANDRON Peruzzi, 1881.

Paleomeandron rude Peruzzi, 1881, p. 8, pl. 1, fig. 4; incertae sedis; Eocene; Monte Fiesole, Mugnone, Italy.

PALEONELUMBO Knowlton, 1930.

Paleonelumbo macroloba Knowlton, 1930, p. 93, pl. 39, fig. 3; pl. 42, figs. 3, 4; leaf, Nymphaeaceae; Dawson arkose, Upper Cretaceous and Eocene(?); Colorado.

PALEONUPHAR Hollick, 1930.

Paleonuphar inopina Hollick, in Hollick and Martin, 1930, p. 75, pl. 40, fig. 5; leaf, Nymphaeaceae; Upper Cretaceous; Yukon River, 6 miles above Nahochatilton, Alaska.

PALEOTAXITES David White, 1929.

Paleotaxites praecursor David White, 1929, p. 107, pl. 49, figs. 1, 3; pl. 50, figs. 1, 2, 6; pl. 48, fig. 3; coniferous twigs, Hermit shale, Permian; Hermit basin, near Yaki Trail, Ariz.

PALIBINIA Korovin, 1932.

Palibinia laurifolia Korovin, 1932, p. 517, pl. 1, Proteaceae; Tertiary; Turkistan.

PALISSYA Endlicher, 1847.

Palissya braunii Endlicher, 1847, p. 306. For *Cunninghamites sphenolepis* Braun, in Münster, 1843 (1839-43), p. 24, pl. 13, figs. 19, 20.

PALIURITES Langeron, 1902.

Paliurites martyi Langeron, 1902, p. 94, pl. 6; fruit, compared with *Paliurus* (Rhamnaceae); Pliocene; Cantal, France.

PALLIOPORIA Kirchheimer, 1934.

Pallioporia symplocoides Kirchheimer, 1934a, p. 771, fig. 8; fruit, Symplocaceae; Tertiary (Braunkohle); Germany. See also Kirchheimer, 1936a, p. 68, pl. 9, figs. 25a-v.

PALMACITES (Schlotheim) Brongniart, 1822.

Palmacites parisiensis Brongniart, 1822, p. 312, pl. 16, fig. 1. [This genus created by Schlotheim, 1820, p. 393, and applied to arborescent lycopod trunk impressions; for example, his *P. oculatus*, p. 394, pl. 17, fig. 1 is clearly a *Sigillaria* and his *P. quadrangulatus* is a *Lepidodendron*. *Palmacites* as used by Brongniart clearly applies to palm leaves; later authors have applied it to supposed palm trunk and petiole impressions.]

PALMANTHIUM Schimper, 1870.

Palmanthium martii (Heer) Schimper, 1870 (1869-74), p. 506; palm flower; Tertiary; Berlingen, Canton Thurgovie, Switzerland. For *Palmacites martii* Heer, 1855, p. 97, pl. 41, figs. 2-4.

PALMATOPHYCUS Boucek, 1941.

Palmatophycus contractus Boucek, 1941, p. 1; alga; Silurian; Beroun, Czechoslovakia.

PALMATOPTERIS Henry Potonie, 1893.

Palmatopteris furcata (Brongniart) Henry Potonie, 1893a, p. 1, pl. 1; figs. 1, 5; sphenopterid foliage; Carboniferous.

PALMITES Hector, 1880.

Palmites pectinata Hector, 1880, p. 48; nom. nud.

PALMOCARPON Miquel, 1853.

Palmocarpum cretaceum Miquel, 1853, p. 51, pl. 7; palm fruit; Upper Cretaceous (Senonian); Mt. St. Peter, Limburg, Belgium.

PALMOCARPON Lesquereux, 1878.

Palmocarpum compositum Lesquereux, 1878a, p. 119, pl. 11, fig. 4; palm fruit?; Tertiary; Placiere Mtn., N. Mex.

PALMOGLOEITES Goeppert, 1869.

Palmoglocites adamantinus Goeppert, 1869, p. 64, pl. 1, fig. 7.

PALMOPHYLLUM Conwentz, 1886.

Palmophyllum succineum Conwentz, 1886, p. 11, pl. 1, figs. 12, 13; leaf fragment in amber, Palmae; Tertiary; West Prussia.

PALMOSPERMUM Reid and Chandler, 1933.

Palmospermum jenkinsi Reid and Chandler, 1933, p. 110, pl. 1, figs. 23, 24; seed; Palmae; London Clay, Eocene; Herne Bay, Kent, England.

PALMOXYLON Schenk, 1882.

Palmoxylon blanfordi Schenk, 1882, p. 355; palm stem; Pliocene; Nerbada River near Dschansi, Bandelkand, India. See also Schenk, in Zittel, 1890 (1879-90), p. 886, fig. 427.

PALOREODOXITES Knowlton, 1930.

Paloreodoxites plicatus (Lesquereux) Knowlton, 1930, p. 41, pl. 11, figs. 1-4; leaves, Arecaceae; Denver formation, Upper Cretaceous and Eocene?; Golden, Colo.

PANACITES Deane, 1902.

Panacites howitti Deane, 1902b, p. 18, pl. 1, fig. 8; Tertiary; Pitfield, Australia.

PANDANITES Tuzson, 1914.

Pandanites acutidens Tuzson, 1914, p. 245, pl. 15, fig. 6; leaf fragment, monocotyledon; Cretaceous; Ruszkabanya, Krasso-Szorenz, Hungary.

PANDANITES Dorf, 1938.

Pandanites corconi Dorf, 1938, p. 46, pl. 3, fig. 4; leaf fragment, Pandanaceae; Upper Cretaceous; Corson Ranch, Wyo.

PANDANOCARPUM (Brongniart) Zigno, 1873.

Pandanocarpum oolithicum (Carruthers) Zigno, 1873 (1873-85), p. 3. For *Kaidacarpum oolithicum* Carruthers, 1868, p. 153, pl. 9, figs. 1-6. *Pandanocarpum oblongum* cited in Brongniart, 1828b, p. 138; nom. nud.; the genus mentioned briefly in Brongniart, 1848, p. 137.

PANDANOPHYLLUM Kryštofovich, 1929.

Pandanophyllum ahnertii Kryštofovich, 1929, p. 524, fig. 4; angiosperm leaf; Cretaceous; near town of Nikolsk-Ussuriysk, Ussuriland, Siberia.

PANSCOREA Saporta, 1882.

Panscorea glomerata Saporta, 1882, p. 25, pl. 5, fig. 1; alga?; Permian; France.

PAPANINIA Fedin, 1943.

Papaninia involucrata Fedin, 1943, p. 365; cone, Coniferales; age unknown; Franz Josef Land.

PAPAVERITES Friedrich, 1883.

Papaverites sp. Frederich, 1883, p. 297, pl. 19, fig. 17; Oligocene; Bornstedt, Saxony.

PAPILIONITES E. W. Berry, 1924.

Papilionites erythrinaformis E. W. Berry, 1924a, p. 171, pl. 33, fig. 9; leaf, Papilionaceae; Fayette sandstone, Eocene; Mossy Creek, 3 miles southwest of Wellborn, Brazos County, Tex.

PARACALAMITES Zalesky, 1927.

Paracalamites striatus (Schmalhausen) Zalesky, 1927a, p. 51, pl. 40, fig. 5; calamite stem impression; Jurassic; Russia.

PARACALAMITINA.

Apparently a mistake for *Paracalamites*, in Zalesky, 1934b, p. 242.

PARACALAMOSTACHYS C. E. Weiss, 1884.

Paracalamostachys polystachya (Sternberg) C. E. Weiss, 1884b, p. 190, pl. 19, figs. 1, 2; articulate cone, attached to stem; Carboniferous.

PARACALLIPTERIS Richter, 1904.

Paracallipteris potontei Richter, 1904, p. 17, pl. 1, fig. 13; leaf, incertae sedis; Upper Cretaceous; Hohlweg near Sternbrunnen, Saxony.

PARACEDROXYLON Sinnott, 1909.

Paracedroxylon scituate Sinnott, 1909, p. 171, pls. 80, 81; araucarian wood; Cretaceous; Second Cliff, Scituate, Mass.

PARACHAETETES Deninger, 1906.

Parachactetes ternquisti Deninger, 1906, p. 65, pl. 6 fig. 6; alga; Mesozoic; Monte Zirra, Sardinia.

PARACREDNERIA Richter, 1905.

Paracredneria fritschii Richter, 1905, p. 15, pl. 2, fig. 14; pl. 3, fig. 9; Upper Cretaceous; Warstedt, Saxony.

PARACUPRESSINOXYLON Holden, 1913.

Paracupressinoxylon cedroides Holden, 1913, p. 537, pl. 39, figs. 11-14; coniferous wood; Jurassic; Yorkshire, England.

PARADOXOCARPUS Nehring 1892.

Paradoxocarpus carinatus Nehring, 1892, p. 454, figs. 18-26; Pleistocene; Klinge near Cottbus, Prussia.

PARADOXOPTERIS Hirmer, 1927.

Paradoxopteris stromeri Hirmer, 1927, p. 609, figs. 733-736; Cretaceous (Cenomanian); Baharije Oasis, Egypt.

PARAENGELHARDTIA Berry, 1916.

Paraengelhardtia eocenica Berry, 1916b, p. 186, pl. 17, figs. 2-5; fruit, Juglandaceae; Lagrange formation, Eocene; Puryear, Henry County, Tenn.

PARAFAGUS W. R. B. Oliver, 1936.

Parafagus otakouia W. R. B. Oliver, 1936, p. 292, figs. 8, 9; leaf, Fagaceae; Pliocene; Kalkorai Valley, Otago, New Zealand.

PARAGONORRACHIS Grand'Eury, 1877.

Paragonorrachis gutbieriana (Presl) Grand'Eury, 1877, p. 381. For *Rhodia gutbieriana* Presl, in Sternberg, 1820-38, p. 111.

PARANOCLADUS Florin, 1940.

Paranocladus dusenii Florin, 1940b, p. 320, pls. 165-166; leafy coniferous shoot; "Permo-Carboniferous"; Iraty, Parana, Brazil.

PARANYMPHAEA E. W. Berry, 1935.

Paranymphea crassefolia (Newberry) E. W. Berry, 1935, p. 39, pl. 7, figs. 4, 5; pl. 9; leaf, Nymphaeaceae; Ravenscrag formation, uppermost Cretaceous?; Ravenscrag Butte, Saskatchewan, Canada.

PARAPECOPTERIS Grand'Eury, 1890.

Parapecopteris nevropteridis Grand'Eury, 1890, p. 288, pl. 5, figs. 2-5.

PARAPHYLLANTHOXYLON Bailey, 1924.

Paraphyllanthoxylon arizonense Bailey, 1924, p. 446, pl. 15; wood, dicotyledon; Colorado group, Upper Cretaceous; Arizona.

PARAPHYLLOCLADOXYLON Holden, 1913.

Paraphyllocladoxylon eboracense Holden, 1913, p. 536, pl. 39, figs. 7-9; coniferous wood; Oolite, Jurassic; Scarborough, England.

PARAPITYS Zalesky, 1911.

Parapitys spenceri (Scott) Zalesky, 1911a, p. 28. For *Dadoxylon spenceri* Scott, 1902, p. 357, pl. 2, figs. 12, 13; pl. 6, figs. 24, 25.

PARARAUCARIA Wieland, 1935.

Pararaucaria patagonica Wieland, 1935, p. 21, pls. 2-5; petrified araucarian cone; Triassic?; Cerro Cuadrado, Santa Cruz, Argentina. See also Wieland, 1929, p. 62.

PARASPORITES Schopf, 1938.

Parasporites maccabei Schopf, 1938a, p. 48, pl. 1, fig. 6; pl. 7, figs. 1-3; spore; No. 5 and No. 6 coal, Pennsylvanian; Belleville, Ill.

PARATHINNFELDIA Richter, 1904.

Parathinnfeldia dubia Richter, 1904, p. 14, pl. 1, fig. 3; leaf fragment, incertae sedis; Upper Cretaceous; Saxony.

PARENCHYMOPHYCUS Duden, 1897.

Parenchymophycus asphalticum Duden, 1897, p. 118, pl. 2; "fucoidal plants"; Genesee shale. Devonian; Indiana.

PARILINOPTERIS Hirmer, 1940.

Palaeontographica, 1940, Band 84, Abt. B, p. 188 (not seen, cited in Gothan, 1942b, p. 138).

PARINARIOXYLON Heurn, 1928.

K. Akad. Wetensch. Amsterdam Vers. 1928 Verh., Band 37, p. 470 (not seen, cited in Gothan, 1942b, p. 138).

PARINEUROPTERIS Hirmer, 1940.

Palaeontographica, 1940, Band 84 Abt. B, p. 188 (not seen, cited in Gothan, 1942b, p. 138).

PARIPTERIS Gothan, 1941.

Palaeont. Zeitschr., Band 22, p. 427 (not seen, cited in Gothan, 1942b, p. 139).

PARKA Fleming, 1857.

Parka decipiens Fleming, 1857, p. 448, fig. 121; Old Red Sandstone, Devonian; Scotland. See also Lang, 1937.

PARKERELLA (Munier-Chalmas) Morellet and Morellet, 1922.

Parkerella montensis Munier-Chalmas, in Morellet and Morellet, 1922, p. 15, pl. 1, figs. 56-60; alga, Dasycladaceae; Eocene; Mons, France.

PARKERIOIDEA Renault, 1901.

Parkerioidea stephanensis Renault, 1901b, p. 350, fern fructification. See Renault, 1902, p. 104, pl. 6, fig. 4; pl. 7 bis.

PARNESINA Steinmann 1899.

Parnesina anulus (Parker and Jones) Steinmann, 1899, p. 152; alga, Dasycladaceae; Miocene; Grignon, France. For *Dactylopora annulus* Parker and Jones, 1860, p. 474. See also Carpenter, 1862, p. 129, pl. 10, figs. 9-14.

PARTHENITES Saporta, 1861.

Parthenites priscus Saporta, in Heer, 1861, p. 146. See Saporta, 1862, p. 261, pl. 10, fig. 4.

PARTSCHIA Presl, 1838.

Partschia brongniartii Presl, in Sternberg, 1838 (1820-38), p. 116. For *Pecopteris hemitelioides* Brongniart, 1828a-38, p. 314, pl. 108, figs. 1, 2; pecopterid foliage; Upper Carboniferous; Saarbrück.

PASIANOPSIS Saporta and Marion, 1878.

Pasianopsis retinervis Saporta and Marion, 1878, p. 48, pl. 7, fig. 2; leaf, Fagaceae; lower Eocene; Gelinden, Belgium.

PASINIA Massalongo, 1851.

Pasinia pyriformis Massalongo, 1851, p. 41. For *Delessertes pyriformis* Massalongo, 1850, p. 48.

PASSALOSTROBUS Endlicher, 1847.

Passalostrobus tessellatus (Bowerbank) Endlicher, 1847, p. 278; cone, Coniferales; Eocene; Sheppey, England. For *Cupressinites tessellatus* Bowerbank, 1840, p. 63, pl. 10, figs. 26, 27, 30, 31.

PASTILLUS Zalesky, 1928.

Pastillus cellulosus Zalesky, 1928, p. 3, pl. 2, fig. 3; Minoussinsk Basin, Siberia.

PATALOXYLON Sahni, 1920.

Pataloxylon scalariforme Sahni, 1920, p. 29, pl. 1, fig. 6; pl. 2, figs. 8-11; wood, dicotyledon; Tertiary; Mt. Meerschaum, near Nerang, Queensland.

PATETE Hector, 1886.

Patete scheffleri Hector, 1886, p. 61, fig. 24; Tertiary-Cretaceous; Pakawau, New England.

PATHEROTHECA Jongmans, 1929.

Reference not seen; cited in Gothan, 1942b, p. 139.

PATZEA Caspary, 1872.

Patzea gnetoides Caspary, 1872, p. 20; Tertiary; Prussia. First? species illustrated: *P. johniana* Conwentz, 1886, p. 136, pl. 13, figs. 8-14.

PECOPTERIDIUM Fontaine and White, 1880.

A suggested generic name, with no species assigned, to include fossils which Fontaine and White assign to *Callipteridium unitum* Fontaine and White, 1880, p. 61. Lacoe, 1884, p. 10, lists the binomial *Pecopteridium unitum* F. and W.

PECOPTERIDIUM Picquenard, 1922.

Pecopteridium pluckenettii (Schlotheim) Picquenard, 1922, p. 347. For *Pecopteris pluckenettii* (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xix. [Note the following from Picquenard, 1922, p. 347: "Je crois devoir réunir sous ce nom, dans un genre d'attente, les frondes filicoides faisant partie du groupe des *Pecopteris Pluckenettii* Sternb., Essai Pl., monde prim., I, fasc. 4, p. xix, et *Sterseii*, Zeiller que sont nom pas des fougères comme les *Pecopteris sensu stricto*, mais des pteridospermées."]

PECOPTERIDIUM Kawasaki, 1934.

Pecopteridium manchuricum Kawasaki, 1934 (1927-34), p. 155, pl. 34, figs. 73-75; pl. 40, fig. 97; fernlike foliage; Jido series, Carboniferous; Tae-dong, district, North Korea.

PECOPTERIS (Brongniart) Sternberg, 1825.

Pecopteris pennaeformis (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xvii. For *Filicites pennaeformis* Brongniart, 1822, p. 233, pl. 2, fig. 3; Carboniferous.

PECOPTEROMEDULLOSA Lotsy, 1909.

Pecopteromedullosa anglica (Scott) Lotsy, 1909, p. 727, fig. 512. For *Medullosa anglica* Scott, 1899.

PECTINOPHYTON Hoeg, 1935.

Pectinophyton norvegicum Hoeg, 1935, p. 12, pl. 4; fig. 3; fertile frond, compared with *Barinophyton*; Middle Devonian; Devonskardet, western Norway.

PEDIASTRITES Zalesky, 1927.

Pediastrites kidstoni Zalesky, 1927b, p. 97, pl. 5, figs. 1, 2; alga?; Chlorophyceae; Carboniferous; Russia.

PELLETIERIA Seward, 1913.

Pelletieria valdensis Seward, 1913, p. 91, pl. 12, fig. 12; pl. 14, fig. 5; fertile fern frond, Schizaeaceae; Wealden; near Hastings, England.

PELOURDEA Seward, 1917.

Pelourdea vogesiaca (Schimper and Mougeon) Seward, 1917, p. 278, fig. 484; cordaitan leaves; Lower Triassic (Bunter sandstone); Vosges, France.

PELTANDRIPITES Wodehouse, 1933.

Peltandripites davisii Wodehouse, 1933, p. 498, fig. 24; pollen, Araceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

PELTASPERMUM Harris, 1937.

Peltaspermum rotula Harris, 1937, p. 34; peltate seed-bearing organ, Pteridospermae; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland. See Harris, 1932a, pl. 6, figs. 3-6.

PELTASTROBUS Baxter, 1950.

Peltastrobus reedae Baxter, 1950, p. 175, figs. 1-6; petrified articulate cone; No. 5 coal, Pennsylvanian; Warrick County, Ind.

PELTOPHYLLUM Massalongo, 1854.

Peltophyllum nelumbioides Massalongo, 1854, p. 22; leaf; Eocene; Monte Bolca, Italy. See Massalongo, 1859a, p. lxxv, pl. 28, figs. 1, 2.

PEMPHIGALETES Zalesky, 1939.

Pemphigaletes, Zalesky, 1939a, p. 326; nom. nud.

PENHALLOWIA Kuntze, 1904.

Penhallowia Kuntze, in Post and Kuntze, 1904, p. 421.

PENICILLITES Meschinelli, 1892.

Penicillites curtipes (Berkeley) Meschinelli, in Saccardo, 1892, p. 789. See Meschinelli, 1898, p. 78, pl. 22, fig. 1.

PENICILLOIDES Paul, 1938.

Reference not seen; cited in Gothan, 1942b, p. 139.

PENTACOLA Mueller, 1877.

Pentacola gulgongensis Mueller, 1877a (1877-79), p. 179; Pliocene; Gulgong, Australia. See Mueller, 1883, p. 12, pl. 15, figs. 19, 20.

PENTEUNE Mueller, 1873.

Penteune clarkei Mueller, 1873 (1871-82), p. 41, pl. 7; Pliocene; Smythes Creek, Victoria.

PENTOXYLON Srivastava, 1944.

Pentoxylon sahnii Srivastava, 1944, p. 74, pl. 1, fig. 11; polystelic stem, Pentoxyleae; Jurassic; Santal Parganas district, Behar, India. Brief description in Srivastava, 1937, p. 273. Full description in Srivastava, 1946, p. 196, pl. 2, figs. 6-17; pls. 3-5. For full consideration of Pentoxyleae, see Sahn, 1948.

PEREBORITES Zalesky, 1934.

Pereborites rarinnervis Zalesky, 1934b, p. 268, fig. 43; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.

PEREMOPTERIS Zalesky, 1937.

Peremopteris sylvaeana Zalesky, 1937b, p. 46, fig. 10; fernlike foliage; Permian; Tchekarda, Russia.

PERFOSSUS Cotta, 1832.

Perfossus angularis Cotta, 1832, p. 52, pl. 10, fig. 1-3; petrified palm; Tertiary; Carlsbad, Bohemia.

PERIASTRON Unger, 1856.

Periastron reticulatum Unger, 1856, p. 171, pl. 8, figs. 13-15; petiole, Pteridospermae?; Upper Devonian; Saalfeld, Thuringia. See also Scott and Jeffrey, 1914.

PERICHODERMA McLean, 1912.

Perichoderma asteroides (Williamson) McLean, 1912, p. 508, fig. 4; spore or Radiolarian?; Carboniferous.

PERICORDAITES Zalesky, 1927.

Pericordaites eugeniae Zalesky, 1927a, p. 45, pl. 27, figs. 1-7; cordaitan wood; Permian; Urals, Russia.

PERIMNESTE Harris, 1939.

Perimneste horrida Harris, 1939, p. 54, pl. 14, figs. 2, 7, 9; Charophyta; Middle Purbeck, Jurassic, Dorset, England.

PERISPORIACITES Felix, 1894.

Perisporiacites larundae Felix, 1894b, p. 271, pl. 19, fig. 3; fungus perithecium?; Eocene; Perekeschkul near Baku. Meschinelli, 1898, p. 15, erroneously attributes this genus to Fries.

PERISPORITES Pampaloni, 1902.

Palaeontographia Italica, 1902, v. 8, p. 126 (not seen, cited in Gothan, 1942b, p. 139).

PERMOPHYLLUM Zalesky, 1937.

Permophyllum incisum Zalesky, 1937b, p. 70, fig. 34; foliage fragment, Ginkgoales?; Permian; Matveyevo, USSR.

PERMOPORA Elias, 1947.

Permopora keenae Elias, 1947, p. 53, pl. 18, figs. 1-11; alga, Dasycladaceae; Childress dolomite, Permian; Childress and Cottle Counties, Tex.

PERMOPTERIDIUM Zalesky, 1939.

Permopteridium densinervum Zalesky, 1939b, p. 353, fig. 31; fern? frond fragment; Permian, Matveyevo, USSR.

PERMOSAMAROPSIS Kuntze, 1904.

Permosamaropsis Kuntze, in Post and Kuntze, 1904, p. 425.

PERMOSPERMA Zalesky, 1939.

Permosperma ornatum Zalesky, 1939b, p. 372, fig. 56; seed; Permian; Matveyevo, USSR.

- PERMOTHECA** Zalessky, 1929.
Permotheca sardykensis Zalessky, 1929a, p. 688, fig. 15; microsporangia; Permian; village of Koullarovo, Arsk, Tatare, USSR.
- PERONOSPORITES** W. G. Smith, 1877.
Peronosporites antiquarius W. G. Smith, 1877, p. 499, figs. 97, 98; fungus; Carboniferous; England.
- PERONOSPOROIDES** John Smith, 1896.
Peronosporoides carbonifera John Smith, 1896, p. 321, pl. 7, figs. 17, 18; fungus spores and mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.
- PERONOSPOROIDES** E. W. Berry, 1916
Peronosporoides palmi E. W. Berry, 1916c, p. 74, pl. 180; spores and mycelium, Peronosporaceae, in silicified palm stem; Oligocene; Bayou Pierre, Miss.
- PERRANDOA** Squinabol, 1891.
Perrandoa protogaea Squinabol, 1891, p. 778, pl. 17, fig. 2; fragment of palm leaf; lower Miocene; Ste.-Justine, Sassello, Italy.
- PERSEOPHYLLUM** Kurtz, 1902.
Perseophyllum hanthalianum Kurtz, 1902, p. 52; Lower Cretaceous; Cerro Guido, Patagonia.
- PERSEOXYLON** Felix, 1887.
Perseoxylon antiquum Felix, 1887b, p. 153, pl. 27a, figs. 1-4; dicotyledonous wood.
- PERUVIOPHYLLUM** Steinmann, 1929.
Peruviophyllum minutifolium Steinmann, 1929, p. 105, fig. 113; fern rachis?; Cretaceous; Huayanco, Peru.
- PESTALOZZITES** E. W. Berry, 1917.
Pestalozzites sabalana E. W. Berry, 1917, p. 46, pl. 8, fig. 3; pl. 9, fig. 9; leaf spot fungus, Melanconiaceae; Alum Bluff formation, Miocene; Alum Bluff, Liberty County, Fla.
- PETCHERIA** Zalessky, 1934.
Petcheria elongata Zalessky, 1934b, p. 288, figs. 74, 75; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.
- PETCHEROPTERIS** Zalessky, 1931.
Petcheropteris splendida Zalessky, 1931b, p. 705, pls. 1, 2; petrified stem, Osmundaceae; Permian; Pechora, Russia.
- PETROPHILOIDES** Bowerbank, 1840.
Petrophiloides richardsonii Bowerbank, 1840, p. 44, pl. 9, figs. 9-15; pl. 10, figs. 5-8; cone, Coniferales; London Clay, Eocene; Herne Bay, Sheppey, England.
- PETROPHYTON** Yabe, 1912.
Petrophyton miyakoense Yabe, 1912, p. 6, pl. 2, figs. 1-8; alga; Cretaceous; Rikuchū province, Japan.
- PETROSPIRAERIA** Stopes and Fujii, 1910.
Petrosphaeria japonica Stopes and Fujii, 1910, p. 4, pl. 1, figs. 1-6; fungus hyphae; Upper Cretaceous; Hokkaido, Japan. Cited in Stopes and Fujii, 1909, p. 558; nom. nud.
- PETZOLDTIA** Unger, 1842.
Petzoldtia tropica Unger, 1842b, p. 176, wood, incertae sedis; Tertiary; Antigua, West Indies.
- PETZIA** Zalessky, 1931.
Acad. sci. U. R. S. S. Bull., 1931, p. 402 (not seen, cited in Gothan, 1942b, p. 140).
- PEUCE** Lindley and Hutton, 1832.
Peuce withami Lindley and Hutton, 1832 (1831-37), p. 73, pl. 24; coniferous wood; 4 miles northwest of Durham, England.
- PEUCEDANITES** Heer, 1859.
Peucedanites spectabilis Heer, 1859, p. 25, pl. 104, fig. 20; fruit, Umbelliferae; Miocene; Oeningen, Switzerland.
- PEZIZITES** Meschinelli, 1892.
Pezizites sylvaticus (Ludwig) Meschinelli, in Saccardo, 1892, p. 775. See also Meschinelli, 1898, p. 49, pl. 5, fig. 14; Discomycete; Salzhausen, Germany.
- PHACIDIOPSIS** Geyler, 1887.
Phacidiopsis sp. Geyler, 1887a, p. 487, pl. 32, fig. 2; fungus, compared with *Phacidium coronatum*; Labaun, Borneo.
- PHACIDITES** Meschinelli, 1892.
Phacidites sinuosus (Ludwig) Meschinelli, in Saccardo, 1892, p. 776. See also Meschinelli, 1898, p. 50, pl. 15, figs. 33-35; fungus, Discomycete; Germany.
- PHACITES** Colla, 1829.
Phacites alpinus (Jacquin) Colla, in Borson, 1829, p. 182.
- PHACOLEPIS** Frenguelli, 1942.
Phacolepis mendozana Frenguelli, 1942, p. 323, pls. 1, 2; cone scale, Coniferales; Triassic; Argentina.
- PHACOPLASMIUM** Reinsch, 1881.
Phacoplasmium sp. Reinsch, 1881, p. 39, pl. 8b, figs. 6-8; Upper Carboniferous; Zwickau, Saxony.
- PHAETHUSA** Koenig, 1825.
Phaethusa lachrymabunda Koenig, 1825, p. 2, pl. 1, fig. 23.
- PHANEROPHLEBITES** Knowlton, 1922.
Phanerophlebitis pealei Knowlton, 1922a, p. 110, pl. 3, fig. 5; leaf fragment, Podiaceae; Laramie formation, Upper Cretaceous; Lafayette, Colo.
- PHASEOLITES** Unger, 1850.
Phaseolites cassiacifolius Unger, 1850a, p. 488; leaf, Leguminosae; Miocene; Radibij, Croatia. Cited in Unger, 1845 (1841-47), p. lxxxv; nom. nud. First species illustrated: *P. orbicularis* Unger, 1851, p. 184, pl. 40, figs. 3, 4.

PHASEOLITES L. R. Wilson and Coe, 1940.

Phaseolites desmoinesensis L. R. Wilson and Coe, 1940, p. 182, pl. 1, fig. 4; spore; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa

PHEGONIUM Unger, 1839.

Phegonium vasculosum Unger, 1839b, p. 14. See discussion under *Fegonium* Unger.

PHELLODENDRONOIDITES Thomson, 1950.

Phellodendronoidites sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 58, pl. B, fig. 43; pollen compared with *Phellodendron*.

PHELLOMYCETES Renault, 1896.

Phellomyces dubius Renault, 1896a, p. 421, fig. 74; fungus; Upper Carboniferous; Autun, France. Meschinelli, 1898, p. 97 cites this genus with the spelling changed to *Phellomycetes*.

PHELLOMYCITES.

See *Phellomyces* Renault.

PHELONITES Fresenius, 1861.

Phelonites lignitum Fresenius, 1861, p. 155, pl. 62, figs. 1-15; Miocene; Salzhausen, Hesse.

PHENACOCCLADUS Cockerell, 1926.

Phenacocladus hendersoni Cockerell, 1926b, p. 111, fig. p. 112; alga, Rhodamelaceae; Green River formation, Eocene; Kimball Creek, Roan Mtn., Colo.

PHENANTHERA Hollick, 1907.

Phenanthera petalifera Hollick, 1907, p. 182, figs. 1, 2; flower allied to Caryophyllaceae, Rosales or Myrtales; Miocene; Florissant, Colo.

PHIALOPHLOIOS Horich, 1915.

Phialophloios quadratus Horich, 1915, p. 426, figs. 1-3; arborescent lycopod stem impression; Upper Carboniferous.

PHIALOPTERIS Presl, 1838.

Phialopteris tenera Presl, in Sternberg, 1838 (1820-38), p. 114, pl. 32, fig. 1; fertile fernlike foliage; Upper Triassic (Keuper); Steindorf near Bamberg, Bavaria.

PHILLIPSIA Presl, 1838.

Phillipsia harcourtii Presl, in Sternberg, 1838 (1820-38), p. 206. For *Lepidodendron harcourtii* Witham, 1833, p. 75, pls. 12, 13.

PHLEBOMERIS Saporta, 1894.

Phlebomeris spectanda Saporta, 1894, p. 168, pl. 29, fig. 14; pl. 30, fig. 1; fern frond, Matoniaceae?; Cretaceous; Portugal.

PHLEBOPTERIS Brongniart, 1836.

Phlebopteris polypodioides Brongniart, 1836 (1828a-38), p. 372, pl. 83, fig. 1; fern leaf, Matoniaceae; Jurassic; Scarborough, England.

PHLEBOXYLON Hartig, 1848.

Phleboxylon pannonica (Unger) Hartig, 1848a, p. 138; coniferous wood; Tertiary (Braunkohle); Germany.

PHLOISBOLITHES Steger, 1883.

Phloisbolithes striatus Steger, 1883, p. 28; Miocene; Kokoschutz, Silesia.

PHOENICITES Brongniart, 1828.

Phoenicites pumila Brongniart, 1828b, p. 121; nom. nud. First valid description?: *Phoenicites spectabilis* Unger, in Heer, 1855, p. 94, pl. 39; palm leaf; Tertiary; Lausanne, Switzerland.

PHOENICOCARPUS Massalongo, 1859.

Phoenicocarpus chiavonicus Massalongo, 1859a, p. 125; nom. nud.; Oligocene; Chiavon, Italy.

PHOENICOPSIS Heer, 1876.

Phoenicopsis angustifolia Heer, 1876c, p. 51, pl. 1, fig. 1d; pl. 2, fig. 3b; cycadophyte? foliage; Jurassic; Kalamundung, Siberia.

PHOENICOPTERIS.

Phoenicopters croizeti Lapparent, 1883, p. 1045; error for *Phoenicopsis*?

PHOLIDOPHLOIOS Zalesky, 1934.

Pholidophloios calmysicus Zalesky, 1934d, p. 1115, fig. 11; lycopod leaf base impression; Carboniferous; Donets, Russia.

PHOLIDOPHORUS Zigno, 1856.

Pholidophorus beggiantianus Zigno, 1856b, p. 331, Jurassic (Oolite); Rotzo, Italy.

PHOLIDOPHYLLUM Zalesky, 1937.

Pholidophyllum ornatum Zalesky, 1937, p. 81, fig. 47; incertae sedis; Permian; Matveyevo, U. S. S. R.

PHOMITES Fritel, 1910.

Phomites myricae Fritel, 1910, p. 14, pl. 20, fig. 13; fungus, compared with *Phoma* (Sphaerioidaceae, Fungi Imperfecti); upper Paleocene; Cessoy (Seine-et-Marne), France.

PHORMIDIODEA Wieland, 1930.

Phormidiodea superba Wieland, 1930, p. 28, fig. 1b; reef-forming alga; Cloverly formation, Lower Cretaceous; 16 miles east of Medicine Bow, Wyo.

PHRAGMOTHYRITES Edwards, 1922.

Phragmothyrites eocaenica Edwards, 1922, p. 69, pl. 8; fungus, Microthyriaceae; Eocene; Isle of Mull, Scotland.

PHTHINOPHYLLUM Stur, 1877.

Phtthinophyllum debile (Sternberg) Stur, 1877, p. 187. For *Pecopteris debile* Sternberg, 1825 (1820-38), Tentamen, p. xviii, pl. 26, fig. 3; Upper Carboniferous; Radnitz, Bohemia.

PHYCODES Debey and Ettingshausen, 1859.

Phycodes sericeus Debey and Ettingshausen, 1859a, p. 200; alga, incertae sedis; Cretaceous; Aachen, Rhenish Prussia.

PHYCOIDELLA Matthew, 1890.

Phycoidella stichidifera Matthew, 1890a, p. 144, pl. 5, figs. 5a-d; alga; Cambrian; Hanford Brook, Nova Scotia, Canada.

PHYCOMYCITES Ellis, 1915.

Phycomycites frodinghamii Ellis, 1915, p. 111, pl. 1; mycelium and sporangia, Phycomycete; Jurassic; Lincolnshire, England.

PHYCOPSIS Rothpletz, 1896.

Phycopsis affinis (Sternberg) Rothpletz, 1896, p. 885, pl. 22, figs. 1, 2; alga.

PHYCOSIPHON Fischer-Ooster, 1858.

Phycosiphon incertum Fischer-Ooster, 1858, p. 59, pl. 15, fig. 4; alga?; Cretaceous?; Gurnigel, Switzerland.

PHYCOSIPHON Massalongo, 1859.

In Massalongo and Scarabelli, 1859, p. 92; a suggested name change for *Brachycladium thomasium* Berkeley, 1848, p. 382, pl. 11, figs. 2a, 2b; Miocene; Prussia.

PHYLLADODERMA Zalesky, 1913.

Phylladoderma arberi Zalesky, 1913, p. 24, pl. 1, fig. 4; pl. 2, figs. 7, 9; pl. 3, 5-8, 10, 11; cordaites? leaf, cuticle preserved; Permian; Chome-chor, Mont Talbei, Russia.

PHYLLADODESME Zalesky, 1929.

Phylladodesme zeileri Zalesky, 1929a, p. 196, pl. 18, figs. 1-4; ginkgophyte? leaf; lower Westphalian, Carboniferous; near Rovenki, Donets Basin, Russia.

PHYLLANTHINIUM Ogura, 1932.

Phyllanthinium pseudohobashiraishi Ogura, 1932a, p. 189, pl. 4; petrified wood, Euphorbiaceae; Tertiary ("Palaeogene"); near Fukuoka City, Kiushu, Japan.

PHYLLERITES Meschinelli, 1892.

Phyllerites palaeocassiae (Ettingshausen) Meschinelli, in Saccardo, 1892, p. 805. See also Meschinelli, 1898, p. 104, pl. 29, fig. 1.

PHYLLITES Brongniart, 1822.

Phyllites populina Brongniart, 1822, p. 237, pl. 14, fig. 4; leaf, dicotyledon; Miocene; Oeningen, Switzerland. Brongniart's genus is based on this species. However, including as it does a miscellaneous assemblage of leaves of doubtful affinity, a type species has little or no real significance.

PHYLOCANNITES Kuntze, 1904.

Phyllocannites Kuntze, in Post and Kuntze, 1904, p. 435.

PHYLLOCHORDA Schimper, 1879.

Phyllochora sinuosa (Ludwig) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 50, fig. 38, alga, Chordophyceae; Upper Devonian; Thuringia.

PHYLLOCLADOPITYS Kräusel, 1928.

Phyllocladopitys capensis Kräusel, in Kräusel and Range, 1928, p. 35, pl. 6, figs. 5, 6; pl. 7, figs. 1-6; coniferous stem; Karroo beds, Permian; German Southwest Africa.

PHYLLOCLADOPSIS Fonatine, 1889.

Phyllocladopsis heterophylla Fontaine, 1889, p. 204, pl. 84, fig. 5; pl. 167, fig. 4; foliage, compared with *Phyllocladus* (Podocarpaceae); Potomac group, Lower Cretaceous; Virginia.

PHYLLOCLADOXYLON Gothan, 1905.

Phyllocladoxylon mülleri (Schenk) Gothan, 1905, p. 55. For *Phyllocladus mülleri* Schenk, in Zittel, 1879-90, p. 873, fig. 424.

PHYLLOCLADITES Visiani, 1858.

Phyllocladites foliosa (Sternberg) Visiani, in Massalongo, 1858c, p. 816. For *Noeggerathia foliosa* Sternberg, 1820-38, p. 33, pl. 20.

PHYLLODERMIMUM Miner, 1935.

Phyllodermium reinschii Miner, 1935, p. 594, pl. 21, figs. 72, 73; angiosperm cuticle; Upper Cretaceous; Amisut, east coast Disco Island, Greenland.

PHYLLOPITYS Zalesky, 1918.

Phyllopitys heeri (Schmalhausen) Zalesky, 1918, p. 23, pl. 15, fig. 7.

PHYLLOPTERIS Brongniart, 1849.

A name created by Brongniart for *Glossopteris phillipsii* Brongniart, 1830 (1828a-38), p. 225, pl. 61 bis, fig. 5; pl. 63, fig. 2; a *Sagenopteris* leaflet; Jurassic; Gristhorpe Cliff, near Scarborough, Yorkshire, England.

PHYLLOSTROBUS Saporta, 1873.

Phyllostrobus lorteti Saporta, 1873b, p. 134; see also Saporta, 1884 (1876-84), p. 636, pl. 221, figs. 1, 2; coniferous foliage and cones; Jurassic; Orbagnoux, France. Generic name cited in Saporta, 1872b, p. 1056.

PHYLLOTAENIA Saporta, 1894.

Phyllotaenia demersa Saporta, 1894, p. 216, pl. 38, fig. 6; leaf fragment, monocotyledon; Upper Cretaceous; Padrao, Portugal.

PHYLLOTENIA Salfeld, 1909.

Phyllotenia longifolia Salfeld, 1909, p. 27, pl. 4, figs. 3-5; foliage and seeds, Ginkgoales?; Jurassic; Salzheimendorf, Germany.

PHYLLOTHALLUS Rothpletz, 1896.

Phyllothallus lumbricarius (Münster) Rothpletz, 1896, p. 902. For *Chondrites lumbricarius* Münster, 1843 (1939-43), p. 79, pl. 2, fig. 1.

PHYLLOTHECA Brongniart, 1828.

Phyllothea australis Brongniart, 1828b, p. 150, articulate stem and foliage; Hawkesbury River, near Port Jackson, Australia. One of first illustrations in a reasonably accessible source appears to be Feistmantel, 1878, p. 83, pl. 6, fig. 3; pl. 7, figs. 1, 2; pl. 15, figs. 1, 2.

PHYMATOCARYON Mueller, 1871.

Phymatocaryon mackayi Mueller, 1871 (1871-82), p. 47, pl. 2; Pliocene; Smythe's Creek, Victoria.

PHYMATODERMA Brongniart, 1849.

Phymatoderma granulatum (Schlotheim) Brongniart, 1849, p. 59. For *Algacites granulatus* Schlotheim, 1822, p. 46, pl. 5, fig. 1; alga?; Jurassic; Württemberg.

PHYMATOLITHES Romanowski, 1890.

Phymatolithes algeformis Romanowski, 1890, p. 142, pl. 21, fig. 5; Lower Jurassic; Thian-Schan, Turkistan, Asia.

PHYSAGENIA Heer, 1855.

Physagenia parlatorii Heer, 1855, p. 109, pl. 42, figs. 2-17; incertae sedis; Tertiary.

PHYSEMATOPITYS Goeppert, 1850.

Physematopitys salisburiioides Goeppert 1850, p. 242, pl. 49, figs. 1-3; coniferous wood; Tertiary (Braunkohle); Schwerta, Lusatia, Germany.

PHYSOPHYCUS Schimper, 1869.

Physophycus marginatus (Lesquereux) Schimper, 1869 (1869-74), p. 207. For *Caulerpites marginatus* Lesquereux, 1869, p. 314, pl. 7; alga?; Carboniferous; Württemberg, also Lawrence County, Pa.

PHYSOPHYLLUM Massalongo, 1858.

Physophyllum tocoaeifolium Massalongo 1858a, p. 122; leaf, Melastomaceae; Tertiary; Italy. See Massalongo, 1859, p. 410, pl. 8, fig. 15; pl. 38, fig. 23.

PHYSOPORELLA Steinmann, 1903.

Physoporella pauciforata (Gumbel) Steinmann, 1903, p. 17, fig. 7; alga, Dasycladaceae; Triassic (Keuper); South Tyrol.

PHYSOSTOMA Williamson, 1876.

Physostoma elegans Williamson, 1876b, p. 160; petrified seed, Pteridospermae; Upper Carboniferous. For illustrations, see Williamson, 1877, p. 262, pl. 11, figs. 77, 78. [Name changed to *Lagenostoma physoides* in Williamson, 1876a, p. 70, and again to *Physostoma elegans*, in Oliver, 1909, p. 74.]

PHYTOCALYX Bornemann, 1886.

Phytocalyx antiquus Bornemann, 1886, p. 13, pl. 1, figs. 1-8; alga?; Cambrian; Sardinia. Earlier citation: Bornemann, 1883, p. 272; nom. nud.

PHYTOLITHUS.

This name applied to a diverse assemblage of fossil plants by Martin, 1809. First citation after 1820 appears to be *Phytolithus sulcatus* Sternberg, 1825 (1820-38), p. 28, pl. 5, figs. 2-6.

PHYTOPSIS Hall, 1847.

Phytopsis tubulosum Hall, 1847, p. 38, pl. 8, figs. 1a-e; plant?; Lowville limestone (Birdseye limestone), Ordovician; near Amsterdam, N. Y.

PHYTORADICULARIA Hollick, 1930.

Phytoradicularia dubia Hollick, in Hollick and Martin, 1930, p. 116, pl. 2, fig. 10; incertae sedis; Upper Cretaceous; Herendeen Bay, Alaska Peninsula.

PIAEA Florin, 1929.

Piaea punctata Florin, 1929a, p. 244, pl. 1, figs. 1-5; pl. 2, figs. 1-4; pl. 3, figs. 1-6; alga, Dasycladaceae?; Permian; Oberhessen, Bidingen, Germany.

PIAELLA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 141.

PICCOLOMINITES Unger, 1845.

Piccolominites sardus Unger, 1845 (1841-47); p. xc; wood; Miocene; Sardinia.

PICEITES Goeppert, 1850.

Piceites reucheanus (Goeppert and Berndt) Goeppert, 1850, p. 209, pl. 30, figs. 1, 2; cone, Coniferales; Tertiary.

PICEOPHYLLUM Ogura, 1932.

Piceophyllum simplex Ogura, 1932b, p. 463, pl. 22, fig. 5; petrified leaf, Abietineae, Coniferales; Cretaceous; Hokkaido, Japan.

PICEOXYLON Gothan, 1906.

Piceoxylon pseudotsugae Gothan, in Henry Potonie, 1906, no. 80, p. 1, fig. 1; coniferous wood; Tertiary; California.

PIETZSCHIA Gothan, 1927.

Pietzschia schulleri Gothan, 1927a, p. 5, pls. 1, 2; petrified stem, related to *Cladoxylon*; Wildenfels shale, Upper Devonian; Saxony.

PILA C. E. Bertrand and Renault, 1892.

Pila vibractensis C. E. Bertrand and Renault, 1892, p. 159, pl. 6; alga?; Permian; Autun, France.

PILODEA Pia, 1937.

Pilodea sp. Pia, 1937, p. 834; alga, Chaetangiaceae; Permian; Sumatra.

PILOPHOROSPERMA Thomas, 1933.

Pilophorosperma granulatum Thomas, 1933, p. 207, pl. 23, fig. 58; pteridosperm inflorescence with seeds enclosed in cupules; Molteno beds, Karroo system, Triassic; Upper Umkomas Valley, Natal.

PILULARITES Goeppert, 1837.

Pilularites braunii Goeppert, 1837, p. 439; Triassic (Keuper); Bayreuth, Bavaria.

PIMPINELLITES Unger, 1839.

Pimpinellites zizoides Unger, 1839a, p. 104; fruit, Umbelliferae; Miocene; Radoboj, Croatia.

PINAKODENDRON C. E. Weiss, 1893.

Pinakodendron musivum C. E. Weiss, in Weiss and Sterzel, 1893, p. 61, pl. 3, fig. 16; Upper Carboniferous; near Wattensteinscheid, Westphalia.

PINIPHYLLUM Nathorst, 1886.

Piniphyllum Nathorst, 1886a, p. 53; nom. nud.

PINITES Lindley and Hutton, 1831.

Pinites brandlingi Lindley and Hutton, 1831 (1831-37), p. 1, pl. 1; cordaitan petrified tree; Carboniferous; Wideopen, near Gosforth, 5 miles north of Newcastle-upon-Tyne. Described and figured but not named by Witham, 1831, p. 31, pl. 4, figs. 1-5; later placed in *Dadoxylon*. See Seward, 1917, p. 254.

PINNULARIA Lindley and Hutton, 1832.

Pinnularia capillacea Lindley and Hutton, 1832 (1831-37), p. 81, pl. 111; probably calamitean roots; Carboniferous; England.

PINOSTROBUS (Feistmantel) Stopes, 1915?

Pinostrobus sussexiensis (Mantel) Stopes, 1915, p. 123, pl. 10, figs. 2-4; pl. 11, fig. 3; abietinean cone; Lower Greensand, Cretaceous; Selmeiston, Sussex, England. Original citation: *Pinostrobus vallidus* Ottokar Feistmantel, 1875, p. 272; nom. nud. See also Stopes, 1915, p. 122.

PINOXYLON Knowlton, 1900.

Pinoxylon dacotense Knowlton, in Ward, 1900a, p. 420, pl. 179; wood, compared with *Pinus* but lacking large rays; Jurassic; 3 miles west of Sturgis, S. Dak.

PINUXYLON Gothan, 1906?

Pinuxylon succiniferum (Goeppert and Berendt) Gothan, in Heinhöf, 1906, p. 118. Cited originally as *Pinuxylon* sp. Gothan, 1905, p. 102. For *Pinites succinifer* Goeppert and Berendt, in Berendt, 1845, p. 89, pl. 2, figs. 1-8.

PIPERITES Goeppert, 1853.

Piperites miquelianus Goeppert, 1853, p. 41, pl. 7, figs. 48, 49; leaf, Piperaceae; Tertiary; Doré Tandjung, Java.

PIROCONITES Gothan, 1914.

Piroconites kusperti Gothan, 1914, p. 42, pl. 28, fig. 4; portion of cone, Bennettiales; Rhaetic; Nürnberg, Germany.

PISONIAEPHYLLITES Hector, 1880.

Pisoniaephyllites novaezealandiae Hector, 1880, p. 49; nom. nud.

PISTITES Hosius and Marck, 1880.

Pistites loriformis Hosius and Marck, 1880, p. 182, pl. 38, figs. 151, 152; leaves, Pistiaceae; Upper Cretaceous Westphalia.

PITOXYLON Hartig, 1848.

Hartig, 1848b, p. 138, proposes this genus to include certain species formerly placed in *Peuce*.

PITUS Witham, 1833.

Pitus antiqua Witham, 1833, p. 37, pl. 8, figs. 1-3; wood, Cordaitales. Lower Carboniferous; Lennel Braes, Tweed Mill, Berwick, Scotland. Witham's name was corrected by later authors to *Pityx*; see Unger, 1842 (1841-47), p. 78; Seward, 1917, p. 285; Scott, 1923, p. 255.

PITYANTHUS (Nathorst) Seward, 1919.

Pityanthus granulatus (Heer) Seward, 1919, p. 395. For *Ophioglossum granulatum* Heer, 1883, pl. 57, figs. 8, 9; abietinean microsporangiate cone; Cretaceous (Patoot); Greenland. Original citation of genus: *Pityanthus* sp. Nathorst, 1899, p. 16, pl. 2, fig. 7.

PITYITES Seward, 1919.

Pityites solmsi Seward, 1919, p. 373, figs. 772, 773; coniferous shoots and cones, appear similar to *Prepinus*; Wealden; Sussex, England.

PITYOCLADUS (Nathorst) Seward, 1919.

Pityocladus longifolius (Nathorst) Seward, 1919, p. 378, figs. 775, 776; foliage shoots, Coniferales; Rhaetic; Scania, Sweden. Originally applied as a subgenus of *Pinites* by Nathorst.

PITYOIDOLEPIS Hollick and Jeffrey, 1909.

Pityoidolepis statensis Hollick and Jeffrey, 1909, p. 53, pl. 9, figs. 13, 14; pl. 27, figs. 1-3; cone scale, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

PITYOPHYLLUM Nathorst, 1899.

Pityophyllum staratschini Nathorst, 1899, p. 19, pl. 2, figs. 24, 25; coniferous leaves; Jurassic; Franz Josef Land.

PITYORADIX Chachloff, 1924.

Pityoradix irkutensis Chachloff, 1924, p. 29; pl. 10, figs. 62, 67; Upper Jurassic; Irkutsk, Siberia.

PITYOSPERMUM Nathorst, 1899.

Pityospermum maakianum (Heer) Nathorst, 1899, p. 17, pl. 2, fig. 15; seed, affinities with *Tsuga*?; uppermost Jurassic; Franz Josef Land.

PITYOSPORITES Seward, 1914.

Pityosporites antarcticus Seward, 1914, p. 23, pl. 8, fig. 45; winged spores, Abietineae; supposedly derived from Beacon sandstone, not older than Rhaetic; Priestley Glacier, Antarctica.

PITYOSTROBUS (Nathorst) Dutt, 1916.

Pityostrobus macrocephalus (Lindley and Hutton) Dutt, 1916, p. 529, pl. 15; cone, compared with *Pinus excelsa* Linnaeus; lower Eocene; Dover, England. Original generic citation: *Pityostrobus* sp. Nathorst, 1899, p. 17, pl. 2, figs. 9, 10.

PITYOXYLON Kraus, 1870.

Pityoxylon sandbergeri Kraus, in Schimper, 1870 (1869-74), p. 378, pl. 79, fig. 8; Triassic (Keuper); Kitzingen, Bavaria.

PITYS.

See *Pitus* Witham.

PLAGIOPODOPSIS Britton and Hollick, 1915.

Plagiopodopsis scudderii Britton and Hollick, 1915, p. 10, figs. 1, 2; moss, compared with *Plagiopus* (Bartramiaceae); Miocene; Florissant, Colo. See later discussion by Steere, 1946, p. 313.

PLAGIOZAMITES Zeiller, 1894.

Plagiozamites planchardi (Renault) Zeiller, 1894, p. 174, pl. 8, fig. 1; pl. 9, fig. 1; cycadophyte? leaf; Permian; Trienbach, Alsace.

PLAGIOZAMIOPSIS Sze, 1943.

Plagiozamiopsis podozamioides Sze, 1943, p. 511, figs. 1-10; cycadophyte foliage; Permian.

PLANOXYLON Stopes, 1916.

Planoxylon hectori Stopes, 1916, p. 120, pl. 4, figs. 1-5; coniferous wood; Cretaceous; Amuri Bluff, New Zealand.

PLANTAGINOPSIS Fontaine, 1905.

Plantaginopsis marylandica Fontaine in Ward, 1905, p. 561, pl. 117, fig. 7; pl. 118, figs. 1, 2; leaf, dicotyledon; Potomac group, Lower Cretaceous; Federal Hill, Baltimore, Md.

PLATAEANTHUS.

Error for *Palacanthus*, in Knowlton, 1893, p. 168.

PLATANINIUM Unger, 1842.

Plataninium acerinum Unger, 1842b, p. 174. See Unger, 1847 (1841-47), p. 138, pl. 47, figs. 8-10.

PLATANITES Forbes, 1851.

Platanites herbridicus Forbes, 1851, p. 103, pl. 4, fig. 1; leaf, compared with *Platanus* (Platanaceae); Tertiary; Isle of Mull, Scotland.

PLATANOIDITES Robert Potonie, 1950.

Platanoidites gertrudae Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 57, pl. B, fig. 40; pollen, Platanaceae?; Pliocene; Chatt-Aquitain, Germany.

PLATANOPHYLLUM Fontaine, 1889.

Platanophyllum crossinerve Fontaine, 1889, p. 316, pl. 158, fig. 5; leaf fragment, compared with *Araliacphyllum* and *Hedera platanoides* Lesquereux; Potomac group; Lower Cretaceous; Virginia.

PLATYCERIPHYTELLUM Velenovsky, 1889.

Platyceriphyllum cretaceum Velenovsky, 1889, p. 29, pl. 5, fig. 16. For *Platycerium cretaceum* Velenovsky, 1889, p. 5; leaf fragment; Cretaceous (Cenomanian); Vyserovic, Bohemia.

PLATYCERITES Goeppert, 1854.

Platycerites wirthgenianus Goeppert, 1854, p. 98; nom. nud.; Miocene; Niederrhein, Germany.

PLATYCOILA Mueller, 1874.

Platycoila sullivanii Mueller, 1874, p. 23, pl. 9, figs. 5-9; angiospermous fruit; lower Pliocene; near Nintingbool, Victoria.

PLATYLEPIS Saporta, 1874.

Platylepis micromyela Saporta, 1874 (1873c-75), p. 278, pl. 120, figs. 1-3; cycadophyte trunk; Jurassic (Lias); Tournay-sur-Odon, France.

PLATYMASTIXIA Kirchheimer, 1934.

Platymastixia cacaoides (Zenker) Kirchheimer, 1934b, p. 790, figs. 21; fruit, Cornaceae; Tertiary (Braunkohle); Altenburg, Germany.

PLATYPEUCE Menge, 1850.

Platypeuce dichotoma Menge, 1850, p. 26, pl. 3, figs. 8-14; Tertiary (Braunkohle); Redlau near Danzig, Prussia.

PLATYPHYLLUM (Dawson) David White, 1905.

Platyphyllum brownianum Dawson, in Smith and White, 1905, p. 37, pl. 2, figs. 1, 2. [Dawson, 1881a, p. 11, proposed *Platyphyllum* for *Cyclopteris brownii* if the latter is found at a later date with a fructification. Dawson, 1888, p. 265, uses the binomial *Platyphyllum brownii* but only in a list and without description. The above reference to White appears to be the first valid one.]

PLATYPTERYGIUM (Schimper) Ottokar Feistmantel, 1886.

Platypterygium balli Ottokar Feistmantel, 1886, p. 37, pl. 2A, figs. 4-8; pl. 3A, fig. 2; cycadophyte leaf; Barakar group; west of Gurtur, western Bengal, India.

PLATYSOLENITES Quenstedt, 1867.

Platysolenites sp. Quenstedt, 1867, p. 842, pl. 80, fig. 20; Tertiary; Russia.

PLATYSPERMUM E. A. N. Arber, 1914.

Platyspermum sulcatum (Presl) E. A. N. Arber, 1914, p. 95, pl. 6, fig. 11; seed; Transition Coal Measures of South Staffordshire and Middle Coal Measures of Warwickshire and Yorkshire, England.

PLECTITES Reinsch, 1881.

Plectites sp. Reinsch, 1881, p. 72, pl. 16a, figs. 1-5; pl. 17a, figs. 1-8; Permian; Stockheim. Württemberg.

PLEIACRON Mueller, 1877.

Pleiocron elachocarpum Mueller, 1877a (1877-79), p. 179; fruit; Tertiary; New South Wales. *See also* Mueller, 1883, p. 2, pl. 15, figs. 15-18.

PLEIOCLINIS Mueller, 1882.

Pleioclinis couchmanii Mueller, 1882 (1871-82), p. 43, pl. 19, figs. 1-11; Pliocene; Nintingbool and Haddon, Victoria.

PLEIOMERITES Ettingshausen, 1868.

Pleiomerites reticulatus Ettingshausen, 1868a, p. 226, pl. 38, fig. 6; leaf, Myrsineae; Tertiary.

PLEIOMEROPSIS Weyland, 1938.

Pleiomeropsis rothenensis Weyland, 1938b, p. 161, pl. 23, figs. 1-7; inflorescence, Myrsinaceae; Tertiary; Rott, Siebengebirge, Germany.

PLEOSPORITES Suzuki, 1910.

Pleosporites shirainus Suzuki, 1910, p. 191, pl. 7, fig. 6; fungus; Upper Cretaceous; Hokkaido, Japan.

PLESIOCAPPARIS Mueller, 1871.

Plesiocapparis prisca Mueller, 1871 (1871-82), p. 40, pl. 4, figs. 9-11; Pliocene; Haddon, Victoria.

PLEURODICTYTES Reinsch, 1881.

Pleurodictytes sp. Reinsch, 1881, p. 89, pl. 29, figs. 1-7; pl. 29a, figs. 1-7; Permian; Stockheim, Württemberg.

PLEUROMEIA Corda, 1852.

Pleuromeia sternbergi (Münster) Corda, 1852, p. 184 (original spelling given by Corda is *Pleuromeya*). For *Sigillaria sternbergi* Münster, 1839 (1839-43), p. 47, pl. 3, fig. 10; Triassic (Bunter Sandstein); Magdeburg, Prussian Saxony.

PLEUROMEYA.

See Pleuromeia Corda, 1852.

PLEUROPLASMIUM Reinsch, 1881.

Pleuroplasmium sp. Reinsch, 1881, p. 24, pl. 1, figs. 1-7; pl. 2, figs. 1-6; Upper Carboniferous; Zwickau, Saxony.

PLEUOSTROMIUM Reinsch, 1881.

Pleurostromium sp. Reinsch, 1881, p. 59, pl. 14a, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

PLEXIPLICA Kirchheimer, 1935.

Plexiplica reidi Kirchheimer, 1935, p. 293, fig. 18; endocarp, Cornaceae; Oligocene (Braunkohle); Helene near Borna, Germany. *See also* Kirchheimer, 1936c, p. 292, pl. 8, figs. 1a-e.

PLINTHIOTHECA Zeiller, 1899.

Plinthiotheca anatolica Zeiller, 1899, p. 54, pl. 4, figs. 18, 18a; incertae sedis; Carboniferous; Bassin d'Heraclée, Asia Minor.

PLOCARITES Massalongo, 1851.

Plocarites polymorphus Massalongo, 1851, p. 63, alga; Tertiary; Italy.

PLOCHMOPELTINITES Cookson, 1947.

Plochmopeltinites masoni Cookson, 1947b, p. 212, pl. 13, figs. 14, 15; ascomata, Micropeltaceae; late Oligocene; Kerguelen Island, South Indian Ocean.

PLUMALINA Hall, 1858.

Plumalina gracilis Hall, 1858, p. 175; probably not a plant; Chemung group, Devonian; Missouri. *See also* Miller, S. A., 1889, p. 134.

PLUMATOPTERIS Kidston, 1894.

Plumatopteris elegans Kidston, 1894, p. 259, pl. 5, figs. 1, 1a; sterile fern foliage; Calderwood group, Carboniferous Limestone series, Lower Carboniferous; East Kilbride, Lanarkshire, Scotland.

PLUTONIA Velenovsky, 1889.

Plutonia cretaceae Velenovsky, 1889, p. 11, pl. 2, figs. 11-20; pl. 3, figs. 1, 2; foliage and cones, Coniferales; Upper Cretaceous; Lipenec, Bohemia.

POACITES Schlotheim, 1820.

It seems evident that Schlotheim proposed this genus to include supposed grass leaves. The species he described are Carboniferous in age and clearly not grasses. A variety of fossils have been assigned to the genus, for example: *Poacites carinata* Brongniart, 1822, p. 238, pl. 14, fig. 2; this species is apparently an arborescent lycopod leaf. *Poacites cocoina* Lindley and Hutton (see Seward, 1898, p. 366); is probably a calamite. *Poacites firmus* Heer, 1855, p. 70, pl. 25, fig. 11; the first well-illustrated description of a fossil that bears good evidence of being a grass and is suggested as the type (Miocene; Lausanne, Switzerland).

POACORDAITES Grand'Eury, 1877.

Poacordaites latifolius (Goeppert) Grand'Eury, 1877, p. 224. For *Noeggerathia palmaeformis* Goeppert, 1852b, p. 216, pl. 15; pl. 16, figs. 1-3; given earlier as *Poacites latifolius* Goeppert, 1844, p. 216.

POACORDAIXYLON Renault, 1885.

Poacordaixylon stephanense Renault, 1885, p. 81, pl. 6, figs. 20-23; cordaitan wood; Upper Carboniferous; Montmartre, St.-Étienne, France.

PODALYRIOPHYLLUM Ettingshausen, 1895.

Podalyriophyllum brochidodromum Ettingshausen, 1895, p. 51, pl. 4, fig. 17; leaf, Leguminosae; Upper Cretaceous; between Warnagh and Oxley Station, Australia.

PODOCARPITES Andrae, 1855.

Podocarpites acicularis Andrae, 1855, p. 45, pl. 10, fig. 5; coniferous leaves?; Jurassic; Hungary.

PODOCARPOIDITES Robert Potonie, 1950.
Podocarpoidites libellus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. C, fig. 6; pollen, Podocarpaceae?; lower Miocene; Niederalusitz, Germany.

PODOCARPOXYLON Gothan, 1904.

Podocarpoxyylon juniperoides Gothan, in Gagel, 1904, p. 272; coniferous wood; Pleistocene; Elmshorn, Prussia. First? illustrated species: *Podocarpoxyylon aparenchymatosum* Gothan, 1908, p. 8, pl. 1, figs. 9-11. See also Gothan, 1905; Seward, 1919, p. 173; Kräusel, 1949.

PODOCARYA (Buckland) Goeppert, 1848.

Podocarya bucklandi Goeppert, in Bronn, 1848, p. 1023; Lower Oolite, Jurassic; Charmouth, England. Originally cited as *Podocarya* sp. Buckland, 1836, p. 505, pl. 43, figs. 2-10; petrified fruit referred to Pandanaceae.

PODOGONIUM Heer, 1859.

Podogonium knorrii Heer, 1859, p. 114, pl. 134, figs. 22-26; pl. 135; pl. 136, figs. 1-9; leaves, Caesalpinae; Miocene, Switzerland.

PODOLOMA Ettingshausen, 1879.

Podoloma polypodioides Gardner and Ettingshausen, 1879, p. 29, pl. 3, figs. 4-6, 9; leaf fragment, Polypodiaceae; Eocene; Bournemouth, England.

PODOSPORITES Rao, 1943.

Podosporites tripakshi Rao, 1943b, p. 182, figs. 1-13; spores with three bladders, probably Podocarpaceae; Jurassic; Nipania, Rajmahal Hills, Behar, India.

PODOSTEMON Unger, 1853.

Podostemon ceratophylloides Unger, in Massalongo, 1853b, p. 7; Eocene; Monte Bolca, Italy.

PODOSTEMONOPSIS Weyland, 1938.

Podostemonopsis tertiaria Weyland, 1938a, p. 90, pl. 11, figs. 6-10; infructescence, Podostemonaceae; Tertiary; Rott, Siebengebirge, Germany.

PODOZAMITES (Brongniart) C. F. W. Braun, 1843.

Podozamites distans (Presl) C. F. W. Braun, in Münster, 1843 (1839-43), p. 28. For *Zamites distans* Presl, in Sternberg, 1820-38, p. 196, pl. 41, fig. 1; Jurassic (Lower Lias); Bayreuth, Bavaria.

POECILITOCAULON Fliche, 1910.

Poecilitocaulon dubium Fliche, 1910, p. 261, pl. 26, fig. 3; stem impression, incertae sedis; Triassic; Meurthe-et-Moselle, France.

POECILITOSTACHYS Fliche, 1910.

Poecilitostachys haugi Fliche, 1910, p. 264, pl. 26, fig. 4; pl. 27, fig. 1; incertae sedis; Triassic; Meurthe-et-Moselle, France.

POECILOXYLON Grand'Eury, 1877.

Poeciloxylon proprium Grand'Eury, 1877, p. 307, wood, some comparison with *Dadoxylon*; Carboniferous; Loire, France.

POLIOEXOLOBUS E. W. Berry, 1938.

Polioexolobus prenuntius E. W. Berry, 1938, p. 128, pl. 51; leaf, Asclepiadaceae; Rio Pichileufu, Argentina.

POLLENITES Robert Potonie, 1931.

Pollenites iliaceus Robert Potonie, 1931a, p. 556, fig. 5; pollen; Miocene.

POLYCARPELLA Reid and Chandler, 1933.

Polycarpella caespitosa Reid and Chandler, 1933, p. 486, pl. 28, figs. 13-21; incertae sedis; London Clay, Eocene; Sheppey, Kent, England.

POLYGONITES Saporta, 1865.

Polygonites ulmaceus Saporta, 1865, p. 92, pl. 3, fig. 14; winged fruit, Polygonaceae; Tertiary; St.-Jean-de-Garguer, France.

POLYGONOCARPUM Weyland, 1938.

Polygonocarpum fimbriatum Weyland, 1938a, p. 87, pl. 11, figs. 1, 1a; winged fruit, Polygonaceae; Tertiary; Rott, Siebengebirge, Germany.

POLYGONOCARPUS (Zeiller) Zalesky, 1907.

Polygonocarpus czarnockii Zalesky, 1907, p. 68, pl. 2, fig. 15; Upper Carboniferous; Dombrowa, Russia.

POLYGONOSPHAERITES Ferdinand Roemer, 1880.

Polygonosphaerites tessellatus (Phillips) Ferdinand Roemer, 1880, p. 297. For *Sphaeronites tessellatus* Phillips, 1841, p. 135, pl. 59, fig. 49; Devonian; Plymouth, England.

POLYLOPHOSPERMUM Brongniart, 1874.

Polylophospermum stephanense Brongniart, 1874, p. 264, pl. 23, figs. 6-8; silicified seed; Carboniferous; St.-Étienne, France.

POLYMORPHOCODIUM Derville, 1931.

Polymorphocodium lapparenti Derville, 1931, p. 54, pl. 4, figs. 12-14, 16; alga, Codiaceae; Carboniferous; Henirette, Bas-Boulonnais, France.

POLYPODIISPORITES Robert Potonie, 1934.

Polypodiisporites favus Robert Potonie, 1934, p. 38, pl. 1, figs. 19, 20; spore, Polypodiaceae; Miocene.

POLYPODIOLITES Sternberg, 1823.

Polypodiolites pectiniformis Sternberg, 1823 (1820-38), pl. 33, fig. 1; cycadophyte frond; Jurassic; Stonesfield, England.

POLYPODITES Goepfert, 1836.

Polypodites mantellii (Brongniart) Goepfert, 1836, p. 341. For illustration, see *Lonchopteris mantelli* Brongniart, in Lindley and Hutton, 1837 (1831-37), p. 59, pl. 171; fern? foliage; Lower Cretaceous; near Wansford, Northamptonshire, England.

POLYPORITES Lindley and Hutton, 1833.

Polyporites bowmanni Lindley and Hutton, 1833 (1831-37), p. 181, pl. 65; fungus, Polyporaceae; Upper Carboniferous; near Wrexham, Denbigh, Wales. Meschinelli, 1892, p. 746, erroneously attributes this genus to Fries.

POLYPTEROCARPUS Grand'Eury, 1877.

Polypterocarpus caudatus Grand'Eury, 1877, p. 506, pl. 15, figs. 7-11; winged seed; Carboniferous; France.

POLYPTEROSPERMUM Brongniart, 1874.

Polypterospermum renaultii Brongniart, 1874, p. 256, pl. 23, figs. 1-3; silicified seed; Carboniferous; St.-Étienne, France.

POLYSIPHONIDES Schimper, 1869.

Polysiphonides koechlini (Heer) Schimper, 1869 (1869-74), p. 178, pl. 3, fig. 5; alga?; Miocene; Bouxwiller, near Frette, France.

POLYSORITES Raciborski, 1889.

Polysorites sp. Raciborski, 1889, p. 138.

POLYSPORIA Newberry, 1853.

Polysporia mirabilis Newberry, 1853a, p. 108; nom. nud.

POLYSTICHITES Presl, 1838.

Polystichites murrayana (Brongniart) Presl, 1838, in Sternberg, 1820-38, p. 117. For *Pecopteris murrayana* Brongniart, 1828a-38, pl. 126, figs. 1-5; fern-like foliage; Jurassic; Scarborough, England.

POLYSTIGMITES Meschinelli, 1892.

Polystigmmites priscus (Massalongo) Meschinelli, in Saccardo, 1892, p. 770. See also Meschinelli, 1898, p. 43, pl. 14, fig. 14; fungus; Miocene; Italy.

POLYTHECA Henry Potonie, 1900.

Polytheca desaillyi (Zeiller) Henry Potonie, 1900, p. 447, fig. 251; fern sporangia; Upper Carboniferous.

POLYTRICHITES Britton, 1926.

Polytrichites spokanensis Britton, in Knowlton, 1926, p. 24, pl. 8, figs. 3, 4; moss, Polytrichaceae; Latah formation, Miocene; Deep Creek, northwest of Spokane, Wash.

POLYTRICHITES Yasui, 1928.

Polytrichites aichiense Yasui, 1928, p. 439, pl. 22, figs. 95-103; moss, compared with *Polytrichum*; upper Tertiary; Aichi coalfield, Japan.

POLYTRIPA Defrance, 1825.

Polytripa elongata Defrance, in Bronn, 1825, p. 44, pl. 7, fig. 15; Palaeocene; Paris, France.

POMADERRITES Ettingshausen, 1883.

Pomaderrites banksii Ettingshausen, 1883, p. 141, pl. 6, fig. 4; leaf, Rhamnaceae; Eocene; Dalton near Gunning, Australia.

PONDICHERRIA Sahni, 1933.

Pondicherria ebenaleoides Sahni, 1933, p. 436, pl. 25; syncarpous multilocular fruit, compared with *Achras* (Sapotaceae) and *Diospyros* (Ebenaceae); probably Upper Cretaceous; Pondicherry, south India.

PONDICHERRIOIDEA.

Error for *Pondicherria*, in Sahni, 1933, p. 436.

PONTEDERITES Knowlton, 1922.

Pontederites hesperia Knowlton, 1922b, p. 154, pl. 36, fig. 6; leaf fragment, Pontederiaceae; Green River formation, Eocene; Greasewood Creek, Rio Blanco County, Colo.

POPULITES Viviani, 1833.

Populites phaeonidis Viviani, 1833, p. 133, pl. 10, fig. 2?; leaf, dicotyledon; Tertiary; near Pavia, Italy.

POPULITES Goepfert, 1852.

Populites platyphyllus Goepfert, 1852a, p. 276, pl. 35, fig. 5, leaf, Salicaceae; Tertiary; Stroppen, Silesia.

POPULOCAULIS Stopes and Fujii, 1910.

Populocaulis yezoensis Stopes and Fujii, 1910, p. 64, pl. 8, fig. 49; petrified stem, compared with *Populus*; Upper Cretaceous; Hokkaido, Japan.

POPULOPHYLLUM Fontaine, 1889.

Populophyllum reniforme Fontaine, 1889, p. 311, pl. 155, fig. 9; pl. 156, fig. 3; leaves, compared with *Populus*; Potomac group, Lower Cretaceous; Brooke, Va.

PORODENDRON (Nathorst) Zalesky, 1909.

Porodendron tenerrimum (Auerbach and Trautschold) Zalesky, 1909, p. 5, pl. 1, figs. 1-4; Carboniferous; Mugodzary, Russia.

POROSTROBOSPORITES Wicher, 1934.

Porostrobosporites bennholdi Wicher, 1934, p. 92, pl. 6, figs. 10-12; Carboniferous; Ruhr, Germany.

POROSTROBUS Nathorst, 1914.

Porostrobus zeilleri Nathorst, 1914, p. 70, pl. 5, figs. 12-16; lycopod cone compression; Paleozoic; Pyramidenberg, Spitzbergen.

POKOSUS Cotta, 1832.

Porosus communis Cotta, 1832, p. 39, pl. 8, figs. 1-3; medullosan? stem fragment; Permian; Rudigsdorf near Chemnitz, Germany.

POROXYLON Renault, 1879.

Poroxylon boysseti Renault, 1879, p. 273, pl. 13, figs. 5–13; pl. 14, figs. 1–8; silicified stem, Cordaitales; Permian; Autun, France.

PORTELIA, Boursault, 1889.

Portelia meunieri Boursault, 1889, p. 728, fig. 2; plant? remains; Upper Jurassic; Portel, Pas-de-Calais, France.

POTAMOCARPITES Ettingshausen, 1852.

Potamocarpites thalictroides (Brongniart) Ettingshausen, 1852a, p. 7. For *Carpollithes thalictroides* Brongniart, 1822, p. 319, pl. 14, fig. 5; Eocene; Isle of Wight, England.

POTAMOGENITES Geoppert, 1848.

Potamogenites vivianii Geoppert, in Bronn, 1848, p. 1035; Eocene; Stradella, Italy.

POTAMOGETOPHYLLUM Fontaine, 1905.

Potamogetophyllum vernonense Fontaine, in Ward, 1905, p. 500, pl. 109, fig. 7; leaf fragment, compared with *Potamogeton* (Potamogetonaceae); Potomac group, Lower Cretaceous; Mt. Vernon, Va.

POTAMOPHYLLITES Brongniart, 1828.

Potamophyllites multinervis Brongniart, 1828b, p. 114; brief generic description only.

POTHOCITES Paterson, 1844.

Pothocites grantonii Paterson, 1844, p. 45, pl. 3; spadix compared with *Typha* (Typhaceae) and *Pothos*? (Araceae); Carboniferous?; Granton, Scotland.

POTHOCITOPSIS Nathorst, 1914.

Pothocitopsis bertillii Nathorst, 1914, p. 78, pl. 3, figs. 5, 6; incertae sedis; Paleozoic; Pyramidenberg, Spitzbergen.

POTONIEA Zeiller, 1899.

Potoniea adiantiformis Zeiller, 1899, p. 52, pl. 4, fig. 19; pteridosperm microsporangiate organ; Carboniferous; Bassin d'Heraclee, Asia Minor.

POUTERLABATIA E. W. Berry, 1938.

Pouterlabatia lanceolata E. W. Berry, 1938, p. 123, pl. 46, figs. 1, 2; leaf, Sapotaceae; Tertiary; Rio Pichileufu, Argentina.

PRAEDEPARIA Stur, 1921.

Praedeparia banatica Stur, in Krasser, 1921a, p. 347; Polypodiaceae; Jurassic (Lower Lias); Stelldorf, Austria.

PRAEENGELHARDTIA.

Error for *Praengelhardtia*, in Knowlton, 1919, p. 501.

PRAMELREUTHIA Krasser, 1918.

Pramelreuthia haberfeldneri Krasser, 1918, p. 533, pl. 1, figs. 5, 6; cycadophyte microsporangiate organ; Upper Triassic; Pramelreith, Lunz, Austria.

PRATTIA d'Archiac, 1850.

Prattia glandulosa d'Archiac, 1850, p. 407, pl. 8, figs. 20, 20a, 20b; Eocene; Biarritz, France. Earlier citation: d'Archiac, 1847, p. 1010; nom. nud.

PREISSITES Knowlton, 1894.

Preissites wardi Knowlton, 1894, p. 458, pl. 219; liverwort, compared with *Preis-sia*; Fort Union formation, Eocene; Burn's Ranch, 30 miles south of Glendive, Mont.

PREISSSLERIA Presl, 1838.

Preissleria antiqua Presl, in Sternberg, 1838 (1820–38), p. 192, pl. 33, figs. 5, 10; incertae sedis; Triassic (Keuper); Steindorf near Bamberg, Bavaria.

PREMNOPHYLLUM Velenovsky, 1884.

Premnophyllum trigonum Velenovsky, 1884, p. 51, pl. 3, fig. 2; leaf, Verbenaceae; Upper Cretaceous; Vyserovic, Bohemia.

PREPECOPTERIS Grand'Eury, 1877.

Prepecopteris dentata (Brongniart) Grand'Eury, 1877, p. 63, peccopterid foliage-bearing schizaeaceae sporangia; Carboniferous; Poile, France. For *Pecopteris dentata* Brongniart, 1828a–38, p. 346, pls. 123, 124. See also Radforth, 1938, 1939.

PREPINUS Jeffrey, 1908.

Prepinus statenensis Jeffrey, 1908, p. 209, pl. 13; short shoots bearing many leaves, Coniferales; Raritan formation, Upper Cretaceous; Kreischerville, Staten Island, N. Y.

PRIMICORALLINA Whitfield, 1894.

Primicorallina trentonensis Whitfield, 1894, p. 357, pl. 11, figs. 14–17; marine alga; Trenton limestone, Middle Ordovician; Middleville, N. Y.

PRIONOTES Reinsch, 1881.

Prionotes sp. Reinsch, 1881, p. 52, pl. 9a, figs. 1–4; Upper Carboniferous; Zwickau, Saxony.

PRITCHARDIA Unger, 1842.

Pritchardia insignis Unger, 1842b, p. 177, wood, incertae sedis; Tertiary; St. Bartholomew Island, West Indies.

PRITCHARDITES Bureau, 1896.

Pritchardites wettinioides Bureau, 1896, p. 284; palm, compared with *Pritchardia pacifica*; Tertiary; Italy.

PRITOPHYLLOCLADUS?

Pritophyllocladus subinterfolius (Lesquereux) Berry; this name cited in a list of fossils in Reagen, 1932, p. 232.

PROARAUCARIA Wieland, 1935.

Proaraucaria mirabilis Wieland, 1935, p. 26; pl. 8, fig. 1; pl. 9, fig. 1; pl. 10; pl. 12, figs. 1, 2; petrified araucarian cone; Triassic; Cerro Cuadrado, Santa Cruz, Argentina. See earlier preliminary account, without illustrations, by Wieland, 1929a.

PROBLEMATOSPERMUM Turutanova-Ketova, 1930.

Problematospermum ovale Turutanova-Ketova, 1930, p. 160, pl. 4, figs. 30, 30a; Jurassic; southwest Turkistan.

PROCHONDRITES Fritsch, 1908.

Prochondrites bifidus Fritsch, 1908, p. 22, pl. 4, fig. 6; alga?; Silurian; Bohemia.

PROLEPIDODENDRON Arnold, 1939.

Prolepidodendron breviinternodium Arnold, 1939, p. 278, pl. 1, figs. 2, 4; lycopod branch bearing two-veined leaves; Upper Devonian; near Port Allegany, McKean County, Pa.

PROPALMOPHYLLUM Lignier, 1895.

Propalmophyllum ligasium Lignier, 1895, p. 146, pl. 7, figs. 20, 21; petiole fragments, incertae sedis; Lower Jurassic (Liassic); Ste. Honorine, France.

PROSPIRAXIS Williams, 1887.

This name proposed in footnote, Williams, 1887, p. 86, for *Spiraxis randalli* Newberry, 1885, p. 217. The latter probably not a plant.

PROTALTINGIA Reid and Chandler, 1933.

Protaltingia europaea Reid and Chandler, 1933, p. 247, pl. 9, figs. 1-5; fruit, Hamamelidaceae; London Clay, Eocene; Sheppey, Kent, England.

PROTAMYRIS Unger, 1850.

Protamyris eocenica Unger, 1850a, p. 476; leaves, Burseraceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 180, pl. 52, fig. 15.

PROTANNULARIA Dawson, 1880?

Protannularia harknessii (Nicholson) Dawson, 1880b, fig. 83, p. 91; no description; Annularia-like foliage; Skidaw series, Lower Silurian. Only other species is: *Protannularia laxa* (Dawson) Arber, 1921, p. 75, fig. 41.

PROTASOLANUS Hörich, 1920.

Protasolanus wieprechtii Hörich, 1920, p. 434, pl. 16; partly decorticated lycopod stem; Lower Carboniferous (Culm); Germany.

PROTEACIDITES Cookson, 1950.

Proteacidites tuberculatus Cookson, 1950, p. 170, pl. 1, figs. 12-14; pollen, incertae sedis; Tertiary; Yallourn, Victoria.

PROTEACITES Caspary, 1882.

Proteacites pinnatipartitus Caspary, 1882, p. 25.

PROTEAPHYLLUM Fontaine, 1889.

Proteaphyllum reniforme Fontaine, 1889, p. 282, pl. 139, fig. 3; pl. 156, fig. 4; pl. 160, figs. 1, 2; leaf, Proteaceae?; Potomac group, Lower Cretaceous; Fredericksburg, Va.

PROTEOIDES Heer, 1866.

Proteoides grevilleaformis Heer, in Capellini and Heer, 1866, p. 17, pl. 4, fig. 11; Cretaceous; Sioux City, Iowa.

PROTEOPHYLLUM Friedrich, 1883.

Proteophyllum bipinnatum Friedrich, 1883, p. 335, pl. 28, figs. 1, 2; Oligocene; Eiselsen, Saxony.

PROTEOPHYLLUM Velenovsky, 1889.

Proteophyllum paucidentatum Velenovsky, 1889, p. 18, pl. 4, figs. 7, 10-13; pl. 5, figs. 13-15; pl. 6, figs. 12-15; leaf, dicotyledon; Upper Cretaceous; Bohemia.

PROTEOPSIS Velenovsky, 1889.

Proteopsis proserpinae Velenovsky, 1889, p. 19, pl. 1, figs. 6-9; fruit, dicotyledon; Upper Cretaceous (Cenomanian); Vyserovic, Bohemia.

PROTEOTITES Kuntze, 1904.

Proteotites Kuntze, in Post and Kuntze, 1904, p. 461.

PROTOXYLON Kräusel, 1939.

Bayer, Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, 47, p. 36 (not seen, cited in Gothan, 1942b, p. 143).

PROTOBARCLAYA Reid and Chandler, 1933.

Protobarclaya eocenica Reid and Chandler, 1933, p. 152, pl. 3, figs. 23-28; fruit, Nymphaeaceae; London Clay, Eocene; Sheppey, Kent, England.

PROTOBLECHNUM Lesquereux, 1880.

Protoblechnum holdeni (Andrews) Lesquereux, 1880, p. 188; fernlike foliage; Carboniferous; Rushville, Ohio. For *Alethopteris holdeni* E. B. Andrews, 1875, p. 420, pl. 51, figs. 1, 2.

PROTOBRACHYOXYLON Holden, 1913.

Protobrachyoxylon eboracense Holden, 1913, p. 541, pl. 40, figs. 29, 30; coniferous wood; Jurassic (Oolite); Scarborough, England.

PROTOCALAMITES Goebel, 1906.

Protocalamites scrobiculatus (Schlotheim) Goebel, 1906, p. 242. For *Calamites scrobiculatus* Schlotheim, 1820, p. 402, pl. 22, fig. 4; Upper Carboniferous; Zurich, Switzerland. [The origin of modern usage, as applied to petrified stems, originates in Lotsy, 1909, p. 528. See also Scott, 1908, p. 37.]

PROTOCALAMOSTACHYS Walton, 1949.

Protocalamostachys arranensis Walton, 1949a, p. 729, pl. 1; petrified Equisetalean cone; Califerous Sandstone series, Lower Carboniferous; Isle of Arran, Scotland.

PROTOCEDROXYLON Gothan, 1910.

Protocedroxylon araucarioides Gothan, 1910, p. 27, pl. 5, figs. 3-5, 7; pl. 6, fig. 1; coniferous wood; Upper Jurassic; Green Harbour, Spitzbergen.

PROTOCLADUS Ettingshausen, 1887.

Protocladus lingua Ettingshausen, 1887b, p. 147; nom. nud.

PROTOCLEPSYDROPSIS Hirmer, 1927.

Protoclepsydropsis kidstoni (Bertrand) Hirmer, 1927, p. 519; petrified stem, Clepsydreaceae; Califerous Sandstone series, Lower Carboniferous; Langton Burn, Berwickshire, Scotland. For *Zygopteris kidstoni* Bertrand, 1911, p. 55, fig. 9.

PROTOCOLLOTUS Reid and Chandler, 1933.

Protocommiphora europaea Reid and Chandler, 1933, p. 273, pl. 11, figs. 1-7; endocarp, Burseraceae; London Clay, Eocene; Sheppey, Kent, England.

PROTOCUPRESSINOXYLON Eckhold, 1922.

Protocupressinoxylon cupressoides (Holden) Eckhold, 1922, p. 491. For *Paracupressinoxylon cupressoides* Holden, 1913, p. 538, pl. 39, figs. 15, 16; coniferous wood; Jurassic; Yorkshire, England.

PROTOCYATHEA Ottokar Feistmantel, 1877.

Protocyathea trichinopoliensis Ottokar Feistmantel, 1877, p. 136, pl. 10, figs. 1, 2; Upper Cretaceous (Cenomanian); near Trichinopoly, India. See also Posthumus, 1931.

PROTODAMMARA Hollick and Jeffrey, 1906.

Protodammara speciosa Hollick and Jeffrey, 1906, p. 199, pl. 1 figs. 5-13; pl. 2, figs. 1-5; cone scales, Araucariaceae; Raritan formation, Upper Cretaceous; Kreischerville, Staten Island, N. Y.

PROTODAPHNE Saporta, 1865.

Protodaphne delessii Saporta, 1865, p. 47; leaf; Tertiary; Sézanne, France.

PROTOFICUS Saporta, 1868.

Protoficus crenulata Saporta, 1868, p. 355, pl. 6, fig. 5; leaf, compared with *Ficus alba*; Eocene; Sézanne, France.

PROTOJUNIPEROXYLON Eckhold, 1922.

Protojuniperoxylon maidstonense (Stokes) Eckhold, 1922, p. 491. For *Cedroxylon maidstonense* Stokes, 1915, p. 149, pl. 12, figs. 1, 2; coniferous wood; Lower Greensand, Cretaceous; Iguanodon Quarry, Maidstone, England. Generic name cited by Eckhold, 1921, p. 2.

PROTOLARIX Saporta, 1876-84.

Protolarix lundgreni (Nathorst) Saporta, 1876-84, p. 469. For *Pinus lundgreni* Nathorst, 1878c, p. 31, pl. 14, figs. 9a, 13-17; pl. 15, figs. 1, 2.

PROTOLEPIDODENDRON Krejčí, 1880.

Protolepidodendron scharianum Krejčí, 1880, p. 203; lycopod stems, foliage Upper Silurian?; Hostlín, Bohemia. First? illustrated in Potonie, Henry, and Bernard, 1903, p. 40, figs. 94-102.

PROTOLEPIDODENDROPSIS Gothan, 1937.

Preuss. geol. Landesanst. Jahrb., 1937, Band 57, p. 497 (not seen, cited in Gothan, 1942b, p. 143).

PROTOLLOTUS Saporta, 1865.

Protolotus raincourtii Saporta, 1865, p. 52; leaf, Rhamnaceae; Tertiary; Sézanne, France.

PROTOMYOITES Meschinelli, 1892.

Protomyces protogenes (Smith) Meschinelli, in Saccardo, 1892, p. 748. Phycmycete; Carboniferous; England. For *Protomyces protogenes* Smith, 1884, p. 333, fig. 140.

PROTONYSSA Reid and Chandler, 1933.

Protonyssa bilocularis Reid and Chandler, 1933, p. 429, pl. 23, figs. 5-10; endocarp, Nyssaceae; London Clay; Eocene; Sheppey, Kent, England.

PROTOSMUNDITES H. N. Andrews and Baxter, 1948.

Protoosmundites wilsonii H. N. Andrews and Baxter, 1948, p. 194, pls. 9, 10; probably a lycopod branch tip; Des Moines group, Pennsylvanian; coal mine of What Cheer Clay Products Co., What Cheer, Iowa.

PROTOPHYLLOCLADOXYLON Kräusel, 1939.

Bayer, Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge 47, p. 16, (not seen, cited in Gothan, 1942b, p. 143).

PROTOPHYLLOCLADUS E. W. Berry, 1903.

Protophylocladus subintegrifolius (Lesquereux) E. W. Berry, 1903, p. 440; compared with *Phyllocladus asplenifolia* Hooker; Cretaceous to Tertiary. For *Phyllocladus subintegrifolius* Lesquereux, 1868, p. 92, and 1874, p. 54, pl. 1, fig. 12.

PROTOPHYLLUM Lesquereux, 1874.

Protophyllum sternbergii Lesquereux, 1874, p. 101, pl. 16; pl. 17, fig. 2; leaf, dicotyledon; Cretaceous; south of Fort Harker, Nebr.?

PROTOPICEOXYLON Gothan, 1907.

Protopiceoxylon extinctum Gothan, 1907, p. 32, figs. 16, 17; coniferous wood; Tertiary; King Karl's Land.

PROTOPINUXYLON Eckhold, 1922.

Protopinuxylon ruffordi (Seward) Eckhold, 1922, p. 491. For *Pinites ruffordi* Seward, 1895, p. 199, and 1896c, p. 417, pls. 2, 3; coniferous wood; Wealden; near Hastings, England.

PROTOPITYS Goeppert, 1850.

Protopitys buchiana Goeppert, 1850, p. 229, pl. 37, figs. 4-7; pl. 38, figs. 1, 2; gymnospermous wood; Carboniferous; Falkenberg, Silesia. See also Posthumus, 1931.

PROTODOCARPOXYLON Eckhold, 1922.

Protodocarpoxylon blewillense (Lignier) Eckhold, 1922, p. 491. For *Cedroxylon blewillense* Lignier, 1907, p. 267, pl. 18, figs. 15-17; pl. 21, fig. 66; pl. 22, fig. 72; coniferous wood; Lower Cretaceous (Gault); France.

PROTOPTERIDIUM Krejčí, 1880.

Protopteridium hostincense Krejčí, 1880, p. 203; Upper Silurian?; Hostin, Bohemia.

PROTOPTERIS Sternberg, 1938.

Protopteris punctata Sternberg, 1838 (1820-38), p. 170, pl. 65, figs. 1-3; leaf base impression of tree fern; Lower Cretaceous; Bohemia. *See also* Corda, 1845, p. 77, pl. 48, fig. 1. Seward, 1910, p. 372, notes: "The generic name *Caulopteris* is used by some authors in preference to Presl's genus; but *Protopteris* is more conveniently restricted to Mesozoic Cyatheaceous stems and *Caulopteris* to Palaeozoic stems, with the internal structure of *Psaronius*." *See also* Posthumus, 1931.

PROTORAVENSARA Reid and Chandler, 1933.

Protoravensara sheppeyensis Reid and Chandler, 1933, p. 214, pl. 7, figs. 3-5; fruit Lauraceae; London Clay, Eocene; Herne Bay, Kent, England.

PROTORCHIS Massalongo, 1859.

Protorchis monorchis Massalongo, 1859a, p. 64, pl. 23, fig. 3; orchidaceous plant?; Eocene; Italy.

PROTORHIPIS Andrae, 1855.

Protorhipis buchii Andrae, 1855, p. 36, pl. 8, fig. 1; leaf fragment, incertae sedis; Lower Jurassic (Lias); Steierdorf, Austria.

PROTORNITHOPTERIS Reed, 1947.

Protornithopteris fremonti (Knowlton) Reed, 1947, p. 149; frond, Schizaeaceae; Frontier formation, Upper Cretaceous; Cumberland, Wyo.

PROTOSALVINIA (Dawson) Clarke, 1885.

Protosalvinia bilobata Clarke, 1885, p. 285, fig. 6; water fern sporocarp?; Devonian; Hopewell, Ontario County, N. Y.

PROTOSPIROXYLON Lingelsheim, 1929.

Protospiroxylon lusaticum Lingelsheim, 1929, p. 111, figs. 1-8; wood, Coniferales; lower Miocene; Niederlausitz.

PROTOSTIGMA Lesquereux, 1877.

Protostigma sigillarioides Lesquereux, 1877, p. 169, pl. 1, figs. 7, 8; lycopod? stem; Cincinnati group, Silurian; near Cincinnati, Ohio.

PROTOTAMUS Langeron, 1899.

Prototamus paucinervis Langeron, 1899, p. 439, pl. 3, fig. 3; leaf, compared with *Tamus*; Eocene; Sézanne, France.

PROTOTAXITES Dawson, 1859.

Prototaxites logani Dawson, 1859, p. 484, figs. 4a-c; alga; Devonian; Gaspé, Canada. For usage of name, *see* Arnold, 1947, p. 52.

PROTOTHAMNOPTERIS Richard Beck, 1920.

Protothamnopteris baldauß Richard Beck, 1920, p. 511, figs. 1-6; coenopterid fern; Permian (Middle Rothliegendes); Chemnitz, Germany. *See* Hirmer, 1927, p. 538.

PRUNINIUM Platen, 1908.

Pruninium gummosum Platen, 1908, p. 122, pl. 3, figs. 2-6; Miocene; Amethyst Mtn., Yellowstone Park, Wyo.

PRUNIPHYLLUM Weyland, 1948.

Pruniphyllum prinoides (Weber) Weyland, 1948, p. 129, leaf, Rosaceae; Tertiary.

PRUNOIDES Perkins, 1904.

Prunoides bursaeformis Perkins, 1904, p. 208, pl. 80, fig. 133; fruit, compared with *Prunus*; Tertiary; Brandon, Vt.

PSAMMOPTERIS Eichwald, 1861.

Psammopteris knorriaformis Eichwald, 1861, p. 304. *See also* Eichwald, 1865 (1860-68), p. 25, pl. 1, fig. 3; pl. 5, figs. 3, 4.

PSARONIOCAULON Grand'Eury, 1877.

Psaroniocalyon sulcatum Grand'Eury, 1877, p. 91, pl. B; arborescent fern stem apparently close to *Psaronius*; Carboniferous; France. *See also* Posthumus, 1931.

PSARONITES Williamson, 1875.

Psaronites renaulti Williamson, 1875, p. 453; *Psaronius* roots; Upper Carboniferous; Oldham, England.

PSARONIUS Cotta, 1932.

Psaronius helmintholithus (Sprengel) Cotta, 1932, p. 32, pl. 5, fig. 1; petrified stem, believed to be *Marattiales*; Chemnitz, Germany. This is suggested as the type, for the first (p. 29) is illustrated only by roots. *See also* Posthumus, 1931.

PSEUDADIANTITES Gothan, 1929.

Pseudadiantites sessilis (v. Röhl) Gothan, 1929, p. 17, pl. 14, figs. 1, 1a; fernlike foliage; Carboniferous; Ruhr, Germany.

PSEUDOALETHOPTERIS Achepohl, 1883.

Pseudoalethopteris sp. Achepohl, 1883; unnumbered page following p. 160; unnumbered plate following pl. 41; foliage, more contracted pinnule attachment than in *Alethopteris*; Upper Carboniferous; Westphalia.

PSEUDOANNULARIA Grand'Eury, 1877.

Pseudoannularia laxa (Dawson) Grand'Eury, 1877, p. 370. For *Annularia laxa* Dawson, 1871, p. 31, pl. 6, figs. 64-73.

PSEUDOARAUCARIA Fliche, 1896.

Pseudoaraucaria loppinetti Fliche, 1896, p. 189, pl. 6, figs. 3, 4; petrified cone, Araucariaceae; Cretaceous (Albien); Clermont and Vaubecourt, France.

- PSEUDOASPIDIOPHYLLUM** Hollick, 1930.
Pseudoaspidiophyllum platanoides Hollick, in Hollick and Martin, 1930, p. 96, pl. 62, figs. 1, 2; leaf, Platanaceae; Upper Cretaceous; Yukon River, 1½ miles below Seventymile Creek, Alaska.
- PSEUDOASTEROPHYLLITES** Velenovsky, 1887.
Pseudoasterophyllites cretaceous (Feistmantel) Velenovsky, 1887, p. 643, figs. 19–25; *Asterophyllites*-like foliage with cone; Cretaceous; Bohemia.
- PSEUDOBAlERA** Matthew, 1906.
Pseudobaiera mcintoshii Matthew, 1906a, p. 395, pl. 8, figs. 1–6; sphenopterid? foliage; Devonian; Duck Cove, Lancaster, New Brunswick, Canada.
- PSEUDOBORNIA** Nathorst, 1894.
Pseudobornia ursina Nathorst, 1894, p. 57, pl. 12, figs. 1–7; pl. 13; pl. 14, fig. 5; calamitelike stem impression; Devonian; Bear Island, Norway.
- PSEUDOCALLIPTERIS** Grand'Eury, 1877.
Pseudocallipteris discreta (Weiss) Grand'Eury, 1877, p. 430; Carboniferous; France. For *Callipteris discreta* Weiss, 1870, p. 872, pl. 20, figs. 1, 2.
- PSEUDOCHAETETES** Peterhans, 1929?
Pseudochaetetes champagnensis Peterhans, 1929, p. 10, pls. 1, 2; Jurassic; Champagne, France.
- PSEUDOCHONDRITES** H. B. Geinitz, 1863.
Pseudochondrites sp. H. B. Geinitz, 1863, p. 530; alga; Permian.
- PSEUDOCORDAITES** (Heer) Fritsch, 1900.
Pseudocordaites palmaeformis (Goepfert) Fritsch, in Beyschlag and Fritsch, 1900, p. 68; Upper Carboniferous; Saxony. For *Noeggerathia palmaeformis* Goepfert, 1852b, p. 216, pl. 15; pl. 16, figs. 1–3.
- PSEUDOCOTYLEDON** Saporta, 1893.
Pseudocotyledon inquirendum Saporta, 1893a, p. xxxiv, pl. 1, fig. 10; leaf, compared with *Cotyledon* (Crassulaceae); Tertiary (Aquitaniens); Bois-d'Asson, Aix, France.
- PSEUDOCTENIS** Seward, 1911.
Pseudoctenis cathiensis (Richards) Seward, 1911b, p. 692, pl. 4, figs. 62, 67; pl. 7, figs. 11, 12; pl. 8, fig. 32; cycadophyte frond fragment; Jurassic.
- PSEUDOCYCAS** Nathorst, 1907.
Pseudocycas insignis Nathorst, 1907, p. 4, pl. 1, figs. 1–5; pl. 2, figs. 1–9; pl. 3, fig. 1; cycadophyte foliage; Lower Jurassic (Lias); Hör, Sweden.
- PSEUDOCYCLOPTERIS** Grand'Eury, 1877.
Pseudocyclopteris oblata (Lindley and Hutton) Grand'Eury, 1877, p. 430; Upper Carboniferous; France. For *Cyclopteris oblata* Lindley and Hutton, 1837 (1831–37), p. 173, pl. 217.
- PSEUDODANAEOPSIS** Fontaine, 1883.
Pseudodanaeopsis seticulata Fontaine, 1883, p. 59, pl. 30, figs. 1–4; fern foliage; Triassic; Clover Hill, Va.
- PSEUDOFRENELOPSIS** Nathorst, 1893.
Pseudofreneopsis felizi Nathorst, in Felix and Nathorst, 1893, p. 52, figs. 6–9; Lower Cretaceous (Neocomian); Tlaxiaco, Mexico.
- PSEUDOGEINITZIA** Hollick and Jeffrey, 1909.
Pseudogeinitzia sequoiiformis Hollick and Jeffrey, 1909, p. 45, pls. 10, 25; cone scales, Coniferales; Cretaceous; Kriecherville, Staten Island, N. Y.
- PSEUDOGINKGO** Velenovsky and Viniklar, 1926.
Pseudoginkgo bohémica Velenovsky and Viniklar, 1926, p. 35, pl. 5, figs. 1–15; Upper Cretaceous (Cenomanian); Bohemia.
- PSEUDOMANGROVIA** Fucini, 1938.
Reference not seen; cited in Gothan, 1942b, p. 144.
- PSEUDONYSSA** Kinkel, 1900.
Pseudonyssa palmiformis Kinkel, 1900, p. 130; fruit, compared with *Nyssa*; Upper Pliocene; Klarbecken near Niederrad, Hesse. See also Engelhardt and Kinkel, 1908, p. 225, pl. 27, fig. 15.
- PSEUDOODONTOPTERIS** Grand'Eury, 1877.
Pseudoodontopteris neuropteroides (Roemer) Grand'Eury, 1877, p. 430. For *Odontopteris neuropteroides* Roemer, 1860, p. 31, pl. 7, fig. 2.
- PSEUDOPECOPTERIS** Grand'Eury, 1877.
Pseudopecopteris defranci (Brongniart) Grand'Eury, 1877, p. 379; Carboniferous; France. For *Pecopteris defranci* Brongniart, 1828a–38, p. 325, pl. 111.
- PSEUDOPECOPTERIS** Lesquereux, 1880.
Pseudopecopteris mazoniana Lesquereux, 1880, p. 190, pl. 32, figs. 1–7; fernlike foliage; Pennsylvanian; Mazon Creek, Ill.
- PSEUDOPEZIZITES** Fiore, 1932.
Soc. naturalisti Napoli Boll., 1932, v. 43, p. 154 (not seen, cited in Gothan, 1942b, p. 144).
- PSEUDOPHRAGMITES** Saporta, 1873.
Pseudophragmites arundinaceus Saporta, 1873a, p. 33, pl. 4, fig. 1; rhizome?; Tertiary; France.
- PSEUDOPINUS** Ettingshausen, 1887.
Pseudopinus wilkinsoni Ettingshausen, 1887a, p. 90, pl. 8, figs. 12–18; foliage shoot and cone, Abietineae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

PSEUDOPOLYPORUS Hollick, 1910.

Pseudopolyporus carbonicus Hollick, 1910, p. 93, figs. 1, 2; a stalked polyporaceous fungus?; Carboniferous; West Virginia.

PSEUDOPROTOPHYLLUM Hollick, 1930.

Pseudoprotophyllum marginatum Hollick, in Hollick and Martin, 1930, p. 92, pl. 52, fig. 2a; pl. 65, fig. 3; leaf, Platanaceae; Upper Cretaceous; Yukon River, 6 miles above Nahochatiltan, Alaska.

PSEUDOPTEROPHYLLUM Florin, 1933.

Pseudopterophyllum cteniforme (Nathorst) Florin, 1933, p. 81, pl. 9, figs. 1-7; cycadophyte leaf; Rhaetic; Bjuv, Sweden.

PSEUDOPTILOPHYLLUM Krasser, 1918.

Pseudoptilophyllum titzei Krasser, 1918, p. 547, pl. 4, fig. 6; cycadophyte foliage; Upper Triassic; Pramelreith, Lunz, Austria.

PSEUDORHIPIDOPSIS P'an, 1937.

Pseudorhipidopsis brevicaulis (Kawasaki and Kon'no) P'an, 1937, p. 265, pl. 1; pl. 2; pl. 3, figs. 4, 5; compared with *Rhipidopsis*; Tafenkou series, Lower Permian; Yuhsien, Honan, China.

PSEUDOSAGENOPTERIS Henry Potonie, 1900.

Pseudosagenopteris elliptica (Fontaine) Henry Potonie, 1900, p. 503. For *Sagenopteris elliptica* Fontaine, 1889, p. 149, pl. 27, figs. 9, 11-17; leaf, Caytoniales?; Potomac formation, Cretaceous; Maryland.

PSEUDOSALVINIA Piton, 1940.

Pseudosalvinia dubia Piton, 1940, p. 17, pl. 13, fig. 6; pinnule fragment, compared with *Salvinia*; Eocene; Menat, France.

PSEUDOSCLEROCARYA Reid and Chandler, 1933.

Pseudosclerocarya lentiformis Reid and Chandler, 1933, p. 303, pl. 13, figs. 25-28; endocarp, Anacardiaceae; London Clay, Eocene; Sheppey, Kent, England.

PSEUDOSIGILLARIA Grand'Eury, 1877.

Pseudosigillaria monostigma (Lesquereux) Grand'Eury, 1877, p. 144. For *Sigillaria monostigma* Lesquereux, 1870, p. 449, pl. 42, figs. 1-5; lycopod stem impression; Upper Carboniferous; France.

PSEUDOSPHEOPTERIS Grand'Eury, 1877.

Pseudosphenopteris integra (Andrae) Grand'Eury, 1877, p. 389. For *Sphenopteris integra* Andrae, in Germar, 1844-53, p. 67, pl. 28, figs. 1-4.

PSEUDOSPOROCHNUS Henry Potonie and Bernard, 1903.

Pseudosporochnus krejčí Henry Potonie and Bernard, 1903, p. 25, figs. 54-81; Psilophytales; upper Middle Devonian; Bohemia.

PSEUDOSPOROGONITES Stockmans, 1948.

Pseudosporogonites hallei Stockmans, 1948, p. 61, pl. 11, figs. 18, 18a; Upper Devonian; Belgium.

PSEUDOSTROMATOPORA Simionescu, 1926.

Pseudostromatopora rumana Simionescu, 1926, p. 105, figs. 4-6; alga?; Cretaceous; Cernavoda, Rumania.

PSEUDOSYRINGODENDRON Grand'Eury, 1890.

Pseudosyringodendron pachyderma (Brongniart) Grand'Eury, 1890, p. 246. For *Sigillaria pachyderma* Brongniart, 1828a-38, p. 452, pl. 150, fig. 1.

PSEUDOTORELLIA Florin, 1936.

Pseudotorellia nordenskioldi (Nathorst) Florin, 1936b. For *Feildenia nordenskioldi* Nathorst, 1897, p. 56, pl. 3, figs. 16-27; pl. 6, figs. 33, 34; Upper Jurassic; Advent Bay, Spitzbergen.

PSEUDOTSUGOIDITES Robert Potonie, 1950.

Pseudotsugoidites sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 48; nom. nud.

PSEUDOVTOLZIA Florin, 1927.

Pseudovoltzia liebeana (Geinitz) Florin, 1927, p. 5. See also Florin, 1929, p. 257, pl. 4, fig. 10; and 1944, p. 479. For *Voltzia liebeana* H. B. Geinitz, 1880, p. 26, pl. 5, figs. 1, 2, 5-7; Upper Permian; Trebnitz, near Gera, Saxony.

PSILODENDRION Hoeg, 1942.

Psilodendron spinulosum Hoeg, 1942, p. 26, pls. 5-7; some resemblance to Psilophyton; Devonian; Spitzbergen.

PSILOPHYTON Dawson, 1859.

Psilophyton princeps Dawson, 1859, p. 478, figs. 1a-i; Psilophytales; Devonian; Gaspé, Canada.

PSILOTIPTHYLLUM Henry Potonie, 1891?

Psilotiphyllum bifidum (Geinitz) Henry Potonie, 1891, p. 979.

PSILOTTES (Braun) Münster, 1842.

Psilotites filiformis Münster, 1842, p. 108, pl. 13, fig. 11; pl. 15, fig. 20; Permian; Daiting near Monheim, Rhenish Prussia. Earliest citation: *Psilotites robustus* Braun, 1840, p. 98; nom. nud.

PSILOTOPSIS Heer, 1883.

Psilotopsis racemosa Heer, 1883, p. 55, pl. 100, figs. 6, 7; incertae sedis; Tertiary; Unartok, Greenland.

PSYCHOTRIPHYLLUM Dean, 1902.

Psychotriphyllum attenuatum Dean, 1902a, p. 60, pl. 15, fig. 2; leaf, compared with *Psychotria loniceroides* (Rubiaceae); Tertiary; Wingello, New South Wales.

PSYGMATOPTERIS Lesley, 1880.

Psygmatopteris grandis Lesley, 1880, p. 133; nom. nud.; Pennsylvanian; West Virginia.

PSYGMOCARPUS Susta, 1932.

Přírod. spol. v Moravské Ostravě Sborník, svazek 7, p. 155 (not seen, cited in Gothan, 1942b, p. 145).

PSYGMOCLADUS Susta, 1932.

Přírod. spol. v Moravské Ostravě Sborník, svazek 7, p. 155 (not seen, cited in Gothan, 1942b, p. 145).

PSYGMOPHYLLUM Schimper, 1870.

Psygmostrobus flabellatum (Lindley and Hutton) Schimper, 1870, (1869-74), p. 193. For *Noeggerathia flabellata* Lindley and Hutton, 1832 (1831-37), p. 89, pls. 28, 29; large cuneate leaves, affinities uncertain; Upper Carboniferous; England.

PSYGMOSTROBOPHYLLUM Susta, 1932.

Přírod. spol. v Moravské Ostravě Sborník, svazek 7, p. 162 (not seen, cited in Gothan, 1942b, p. 145).

PSYGMOSTROBUS Susta, 1932.

Přírod. spol. v Moravské Ostravě Sborník, svazek 7, p. 156 (not seen, cited in Gothan, 1942b, p. 145).

PTLEACARPUM Weyland, 1948.

Ptleacarpum bronni Weyland, 1948, p. 130, pl. 31, fig. 5; winged fruit; Tertiary.

PTLEOIDITES Thomson, 1950.

Ptleoidites sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 58; nom. nud.; pollen compared with *Ptlea*; Miocene; Chatt-Aquitain, Germany.

PTENOSTROBUS Lesquereux, 1874.

Ptenostrobus nebrascensis Lesquereux, 1874, p. 114, pl. 24, fig. 1; cone, Coniferales?; Cretaceous; near Winnebago, Nebr.

PTERALETES Zalessky, 1939.

Pteraletes Zalessky, 1939a, p. 326; nom. nud.

PTERIDITES Tuzson, 1914.

Pteridites staubii Tuzson, 1914, p. 236, pl. 13, fig. 4; fern foliage; compared with *Pteridium*; Oligocene; Zsilvolgy Valley, Petroseny, Hungary.

PTERIDOLEIMMA Debey and Ettingshausen, 1859.

Pteridoleimma elisabethae Debey and Ettingshausen, 1859b, p. 222, pl. 5, figs. 5-9; sterile fern foliage; Upper Cretaceous; Aachen, Rhenish Prussia.

PTERIDOPSIS Howse, 1890.

Pteridopsis plumosa Howse, 1890, p. 85, pl. 3; fernlike frond fragment, some similarity to *Alethopteris*; Upper Carboniferous; Jarrow-on-the-Tyne, England.

PTERIDORACHIS Nathorst, 1902.

Pteridorachis striata Nathorst, 1902a, p. 12, pl. 1, fig. 8; fern? rachis fragment; Upper Devonian; Bear Island, Norway.

PTERIDOTHECA Scott, 1907.

Pteridotheca williamsoni Scott, 1907, p. 184, fig. 14; annulate fern sporangia, family uncertain; Upper Carboniferous; England. See also Scott, 1920, p. 265.

PTERIDOZAMITES Corsin, 1929.

Pteridozamites zamioides (Bertrand) Corsin, 1929, p. 230, pls. 7-10; frond, male fructification and seeds, affinities with pteridosperms and cycadophytes; Westphalian, Carboniferous; mines of Bruay, France.

PTERIGOPHYCOS Massalongo, 1858.

Pterigophycos spectabilis Massalongo, 1858b, p. 743. alga; Eocene; Monte Bolca, Italy.

PTERISPERMOSTROBUS Stöpes, 1914.

Pterispermostrobus bifurcatus Stöpes, 1914, p. 74, pl. 17, fig. 45; pl. 25, fig. 69; pteridosperm cupulate organ?; Pennsylvanian; Fern Ledges, Lancaster, New Brunswick, Canada.

PTERISPERMOTHECA Carpentier, 1919.

Pterispermotheca sp. Carpentier, 1919a, p. 89, pl. 3, figs. 5-7; microsporangia compared with *Archaeopteris hitchocki*; Lower Carboniferous; France.

PTEROBALANUS E. W. Berry, 1922.

Pterobalanus texanus E. W. Berry, 1922c, p. 20, pl. 15, figs. 1, 2; winged fruit, incertae sedis; Wilcox group, Eocene; half a mile west of Carrizo Springs, Dimmit County, Tex.

PTEROCARPITES Keferstein, 1834.

Pterocarpites antiquus Keferstein, 1834, p. 862.

PTEROCYCADITES C. F. W. Braun, 1840.

Pterocycadites münsteri C. F. W. Braun, 1840, p. 100; nom. nud.

PTERODICTYON Unger, 1856.

Pterodictyon annulatum Unger, 1856, p. 172, pl. 8, fig. 17; incertae sedis; Upper Devonian; Saalfeld, Thuringia.

PTEROPETALUM Menge, 1858.

Pteropetalum palaeogonum Menge, 1858, p. 14, figs. 20-23; Tertiary; Baltic Prussia.

PTEROPHYCUS Herzer, 1902.

Pterophycus plicatus Herzer, 1902, p. 40, fig. 1; "fucoid," incertae sedis; Carboniferous; Marietta, Ohio.

PTEROPHYLLUM Brongniart, 1828.

Pterophyllum longifolium Brongniart, 1828b, p. 95. For *Algaucites filicoides* Schlotheim, 1822, pl. 4, fig. 2. Problem of citing a type species here is noted by Seward, 1897, p. 548-550. See also Harris, 1932b, p. 20, 40.

PTERORRACHIS Frenguelli, 1942.

Pterorrachis ambigua Frenguelli, 1942, p. 303, pl. 1, fig. 1; probably male organ of *Zuberia* (see Frenguelli, 1944); Triassic; Argentina.

PTEROSPERMITES Heer, 1859.

Pterospermites vagans Heer, 1859, p. 36, pl. 109, figs. 1-5; winged seeds?; Tertiary; Oeningen, Switzerland.

PTEROSPERMUM E. A. N. Arber, 1914.

Pterospermum anglicum E. A. N. Arber, 1914, p. 94, pl. 8, figs. 51, 52; seed; Middle Coal Measures; Upper Carboniferous; Cosely, South Staffordshire, England.

PTEROTRILETES Zalesky, 1939.

Pterotriletes Zalesky, 1939a, p. 326; nom. nud.

PTEROZAMITES C. F. W. Braun, 1843.

Pterozamites scitamineus (Sternberg) C. F. W. Braun, in Münster, 1843, p. 29. For *Taeniopteris scitaminea* Presl, in Sternberg, 1820-38, p. 139. For illustrations, see *Phyllites scitamineaeformis* Sternberg, 1820-38, p. 39, pl. 37, fig. 2.

PTERUCHUS Thomas, 1933.

Pteruchus africanus Thomas, 1933, p. 234, pl. 24, figs. 71, 72; pteridosperm microsporangiate inflorescence; Molteno beds, base of Stormberg series, Triassic; Upper Umkomas Valley, Natal.

PTERYGOPTERIS Johansson, 1922.

Pterygopteris angelini (Nathorst) Johansson, 1922, p. 2, pl. 1; fertile fern frond fragment, compared with *Laccopteris*; Rhaetic; Skromberga, Sweden.

PTILOCARPUS Lesquereux, 1870.

Ptilocarpus bicornutus Lesquereux, 1870, p. 493; winged seed; Carboniferous; Coshocton, Ohio.

PTILOPHYLLUM Morris, 1840?

Ptilophyllum acutifolium Morris, in Grant, 1840, p. 327, pl. 21, figs. 1a-3; cycadophyte leaf; "south of Charivar Range," East India. See also Seward, 1917, p. 512-522.

PTILOPHYTON Dawson, 1878.

Ptilophyton thomasoni Dawson, 1878, p. 385, pl. 4; lycopod; Devonian; Caithness, Scotland.

PTILORHACHIS Corda, 1845.

Ptilorhachis dubis Corda, 1845, p. 84, pl. 54, figs. 17-19.

PTILOTTES Massalongo, 1859.

In Massalongo and Scarabelli, 1859, p. 92; a suggested name change for *Chondrites penicillatus* Kurr, 1845, p. 15, pl. 3, fig. 7; Lower Lias; Bodelshausen, Württemberg.

PTILOZAMITES Nathorst, 1878.

Ptilozamites nilssoni Nathorst, 1878b, p. 23, pl. 3, figs. 1-5, 8; cycadophyte foliage; Rhaetic; Höganäs, Sweden.

PTYCHOCARPUS C. E. Weiss, 1869.

Ptychocarpus hexastichus C. E. Weiss, 1869, p. 95, pl. 11, fig. 2; fertile fern compression; Upper Carboniferous; Breitenbach, Rhenish Prussia.

PTYCHOPHYLLUM.

Error for *Ptychnophyllum*, in Brongniart, 1849, p. 138.

PTYCHOPTERIS Corda, 1845.

Ptychopteris macrodiscus (Brongniart) Corda, 1845, p. 76. See also Brongniart, 1828a-38, pl. 139; and Posthumus, 1931.

PTYCHOTESTA Brongniart, 1874.

Ptychotesta tenuis Brongniart, 1874, p. 263, pl. 22, figs. 9-11; silicified seed; Carboniferous; St.-Étienne, France.

PTYCHOXYLON Renault, 1896.

Ptychoxylon levyi Renault, 1896a, p. 313, pl. 69, figs. 57-63; petrified cycadophyte stem; Upper Carboniferous; Champ des Borgis, France.

PUCCINITES Ettingshausen, 1853.

Puccinites lanceolatus Ettingshausen, 1853, p. 26, pl. 4, fig. 11; *Puccinia*-like rust?; Eocene; Haering, Tirol, Austria.

PUNCTATASPORITES Ibrahim, 1933.

Punctatasporites sabulosus Ibrahim, 1933, p. 37, pl. 5, fig. 43; spore; Carboniferous.

PUNCTATISPORITES Ibrahim, 1933.

Punctatisporites punctatus Ibrahim, 1933, p. 21, pl. 2, fig. 18; spore; Carboniferous.

PUNCTATOSPORITES Ibrahim, 1933.

Punctatosporites minutus Ibrahim, 1933, p. 40, pl. 5, fig. 33; spore; Carboniferous.

PUNICITES Weber, 1855.

Punicites hesperidum Weber, in Wessel and Weber, 1855, p. 157, pl. 30, fig. 11; calyx; Tertiary; Rott, Germany.

PURSONGIA Zalesky, 1937.

Pursongia amalitzkii Zalesky, 1937a, p. 13, fig. 1; *Glossopteris*-like leaf; Permian; near village of Koltchoumkina, Ourals, Russia.

PUSTULARIA Royle, 1840.

Pustularia calderiana Royle, 1840 (1833-40), p. xxix*; nom. nud.

PYCNOIS Stenzel, 1872.

Pycnois densa (Unger) Stenzel 1872, p. 71. For *Fasciculites densus* Unger, 1850, p. 337; Tertiary; India.

PYCNOLOBIUM Saporta, 1861.

Pycnolobium tetraspermum Saporta, in Heer, 1861, p. 162; fruit; Leguminosae; Miocene; Manosque, France.

PYCNOPHYLLITES Tuzson, 1911.

Pycnophyllites brandlingi (Lindley and Hutton) Tuzson, 1911, p. 22. For *Pinites brandlingi* Lindley and Hutton, 1831-37, p. 1, pl. 2; Upper Carboniferous; Wideopen, near Newcastle, England.

PYCHNOPHYLLUM Brongniart, 1849.

Pychnophyllum borassifolia (Sternberg) Brongniart, 1849, p. 114. For *Flabellaria borassifolia* Sternberg, 1825 (1820-38), p. 32, pl. 18. See note under *Cordaites*.

PYCHNOPORIDIUM Yabe and Toyama, 1928.

Pychnoporiidium lobatum Yabe and Toyama, 1928, p. 146, pl. 20, fig. 3; pl. 21, figs. 1-5; pl. 22, fig. 1; alga, compared with *Solenoporella*, *Ortonella*, etc.; Torinosa limestone; "Younger Mesozoic"; Iwaki, Japan.

PYCNOXYLON Cribbs, 1938.

Pycnoxylon leptodesmon Cribbs, 1938, p. 321, pls. 1-4; petrified stem, Cordaitales; Reeds Spring limestone, Mississippian; Missouri.

PYTHITES Pampaloni, 1902.

Pythites disodilis Baccarini, in Pampaloni, 1902, p. 124, pl. 10, figs. 5, 6; fungus mycelium and spores, Oomycete?; Miocene; Melilli, Sicily.

Q

QUERCINIUM Unger, 1842.

Quercinium sabulosum Unger, 1842b, p. 173; wood; Tertiary; Austria. First, species illustrated: *Q. austriacum* Unger, 1841-47, p. 107, pl. 29, figs. 4-6.

QUERCIPHYLLUM Nathorst, 1888.

Querciphyllum lonchitis Nathorst, 1888, p. 205, pl. 18, fig. 8; leaf, compared with *Quercus*; Miocene; Yamakumadamura, Echigo province, Japan. Generic name cited in Nathorst, 1886, p. 53; nom. nud.

QUERCIPOLLENITES Wolff, 1934.

Quercipollenites callosus Wolff, 1934, p. 71, pl. 5, fig. 10; Pliocene; Freigericht mine near Dettingen, Bavaria.

QUERCITES Berger, 1832.

Quercites lobatus Berger, 1832, p. 22, pl. 4, figs. 1, 3-5; Lower Lias; Coburg, Germany.

QUERCODITES Robert Potonie, 1950.

Quercoidites henrici Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 54, pl. B, figs. 22, 23; pollen, Fagaceae?; Miocene; Chatt-Aquitain, Germany.

QUERCOPHYLLUM Fontaine, 1889.

Quercophyllum grossedentatum Fontaine, 1889, p. 307, pl. 156, fig. 9; leaves, compared with *Quercus*; Potomac group, Lower Cretaceous; Brooke, Va.

QUERVAINIA T. M. Harris, 1932.

Quervainia spectabilis T. M. Harris, 1932a, p. 16, fig. 9; cycadophyte leaf?; *Stachyotaxus* bed, Rhaetic; Scoresby Sound, east Greenland.

R

RABDOTUS Presl, 1838.

Rabdotus verrucosus Presl, in Sternberg, 1838 (1820-38), p. 193, pl. 13; incertae sedis; Carboniferous; Swina, Bohemia.

RACHIOPTERIS Williamson, 1874.

Rachiopteris aspera Williamson, 1874a, p. 684, pls. 51, 52. See Posthumus, 1926.

RACOBLASTITES Reinsch, 1881.

Racoblastites sp. Reinsch, 1881, p. 80, pl. 19, figs. 1-5; pl. 20, figs. 1-6; pl. 21, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

RACOSTROMIUM Reinsch, 1881.

Racostromium sp. Reinsch, 1881, p. 53, pl. 12a, figs. 1-4; pl. 13a, fig. 6; Upper Triassic (Keuper); Basel, Switzerland.

RADICITES Henry Potonie, 1893.

Radicites capillacea (Lindley and Hutton) Henry Potonie, 1893, p. 261, pl. 34, fig. 2.

RADICOPSIS Fucini, 1938.

Reference not seen; cited in Gothan, 1942b, p. 146.

RADICULITES Lignier, 1906.

Radiculites reticulatus Lignier, 1906, p. 193, figs. 1-3; roots, described as of Sequoian affinities; possibly Cordaitan (see Seward, 1917, p. 217); Carboniferous (Stephanien); Grand Croix near St.-Étienne, France.

RADICULITES Zalesky, 1937.

Radiculites luganicus Zalesky, 1937d, p. 191, figs. 40, 41; roots?, incertae sedis; Permian; Russia.

RADIMSKYA Ettingshausen, 1890.

Radimskya trinervia Ettingshausen, 1890, p. 81, pl. 2, fig. 22; flower, Alismaceae?; Miocene; Schoenegg, Styria.

RADIOPHYTON Meunier, 1887.

Radiophyton siarii Meunier, 1887, p. 59, fig. 1; Jurassic; near Boulogne-sur-Mer, France.

RADIOSPERMUM E. A. N. Arber, 1914.

Radiospermum perpusillum (Lesquereux) E. A. N. Arber, 1914, p. 102, pl. 7, fig. 31; seed; Middle Coal Measures; Upper Carboniferous; Billingsley Colliery, Wyre Forest, Shropshire, England.

RADIX Fritsch, 1908.

Radix corrugatus Fritsch, 1908, p. 8, pl. 6, fig. 8; plant?; Silurian; Bohemia.

RADSTOCKIA Kidston, 1923.

Radstockia sphenopteroides Kidston, 1923b, p. 373, pl. 75, figs. 3, 3a; fertile Coenopterid? fern; Radstock group, Upper Carboniferous; Radstock, Somerset, England.

RADULITES Sadebeck, 1886.

Radulites macrolobus Sadebeck, 1886, p. 121; moss; Tertiary; Prussia; nom. nud.

RAISTRICKIA Schopf, Wilson, and Bentall, 1944.

Raistrickia grovensis Schopf, in Schopf, Wilson, and Bentall, 1944, p. 55, fig. 3; No. 6 coal, uppermost Carbondale formation, Pennsylvanian; near Middle Grove, Fulton County, Ill.

RAJMAHALIA Sahni and Rao, 1934.

Rajmahalia paradoxa Sahni and Rao, 1934, p. 265, pl. 36, figs. 12, 13; top of Bennettitalean receptacle; Jurassic; Rajmahal Hills, India. See also Sahni and Rao, 1935.

RAMALINITES C. F. W. Braun, 1840.

Ramalinites lacerus C. F. W. Braun, 1840, p. 94; nom. nud.

RAMICALAMUS Matthew, 1906.

Ramicalamus dumosus Matthew, 1906a, p. 115, pl. 8, figs. 2-5; articulate stem impression; *Dadoxylon* sandstone, Little River group, Devonian; Duck Cove, Lancaster, New Brunswick, Canada.

RAMMLUS.

See *Ramulus*.

RAMULARITES Pia, 1927.

Ramularites oblongisporus (Caspary) Pia, in Hirmer, 1927, p. 122; fungus, Mucedinaceae; Fungi Imperfecti; Eocene. For *Ramularia oblongispora* Caspary, 1887, p. 8. See also Caspart, 1907, p. 15, pl. 1, figs. 11, 11a.

RAMULUS.

Sze, 1930, p. 29, cites *Ramulus cordaitoides* Schenk. The latter refers to *Ramulus cordaitidis* which was given by Schenk, 1883c, on page opposite pl. 44. It was evidently not intended as a binomial but rather as a descriptive phrase for a cordaitan branch.

RANUNCULITES Hector, 1880.

Ranunculites peltatolia Hector, 1880, p. 49; nom. nud.

RAPHAELIA Debey and Ettingshausen, 1859.

Raphaelia neuropteroides Debey and Ettingshausen, 1859b, p. 220, pl. 4, figs. 23-28; pl. 5, figs. 18-20; fern frond fragments; Upper Cretaceous; Aachen, Rhenish Prussia.

RAETANIA Hollick and Jeffrey, 1909.

Raetania gracilis (Newberry) Hollick and Jeffrey, 1909, p. 26, pl. 6; coniferous leafy twig; Cretaceous; Kreischerville, Staten Island, N. Y.

RAUMERIA Goeppert, 1853.

Raumeria schulziana Goeppert, 1853c, p. 259, pl. 7, figs. 1-5; pl. 8, figs. 1-3. Earlier citation: Goeppert, 1844, p. 217; nom. nud. See also Wieland, 1934.

RAVENALOSPERMUM Saporta, 1894.

Ravenalospermum invertissimum Saporta, 1894, p. 200, pl. 36, figs. 13, 14; winged seeds?; referred to Musaceae or Bromeliadaceae; Cretaceous (Albien Supérieur); Nazareth, Portugal.

RAZUMOVSKYA Vologdin, 1939.

Razumovskya uralica Vologdin, 1939, p. 251, pl. 1, figs. 1, 2; pl. 5, figs. 3, 4; calcareous alga; Middle Cambrian; South Urals.

RECEPTACULES Defrance, 1827?

Receptacules neptuni Defrance, 1827, p. 7.

REIMANNIA Arnold, 1935.

Reimannia aldenense Arnold, 1935, p. 5, pl. 1, figs. 1, 6, 9; petrified psilophyte? stem; Ludlowville shale, Middle Devonian; Spring Creek, near Alden, Erie County, N. Y.

REINSCHIA C. E. Bertrand and Renault, 1893.

Reinschia australis C. E. Bertrand and Renault, 1893, p. 321, pls. 4-7; "Permo-Carboniferous"; Australia. Earlier citation: Bertrand, C. E., and Renault, Bernard, 1892, p. 172; nom. nud.

REINSCHOSPORA Schopf, Wilson, and Bentall, 1944.

Reinschospora bellitas Bentall, in Schopf, Wilson, and Bentall, 1944, p. 53, fig. 2; spore, Battle Creek coal seam, Pennsylvanian; north side of Sweden Cove, Marion County, Tenn.

RENAULTIA Stur, 1883.

Renaultia intermedia (Renault) Stur, 1883, p. 759, fig. 26; fertile fern pinules, Marattiaceae?

RENAULTIA Zeiller, 1883.

Renaultia chaerophylloides (Brongniart) Zeiller, 1883, p. 208, 185; pl. 9, figs. 16, 17; fertile fern foliage; Carboniferous; France.

RESTIACITES Saporta, 1861.

Restiacites pleiocaulis Saporta, in Heer, 1861, p. 144; Eocene; Provence, France.

RETICULATASPORITES Ibrahim, 1933.

Reticulatasporites facetus Ibrahim, 1933, p. 38, pl. 5, fig. 36; spore; Carboniferous.

RETICULATISPORITES Ibrahim, 1933.

Reticulatisporites reticulatus Ibrahim, 1933, p. 33; spore; Carboniferous. For *Sporonites reticulatus* Ibrahim, 1932, p. 447, pl. 14, fig. 3.

RETICULUM Stefani, 1879.

Reticulum textum (Heer) Stefani, 1879, p. 446. For *Palaeodictyon textum* Heer, 1876, p. 118, pl. 43, figs. 18-20.

RETINODENDRON Zenker, 1833.

Retinodendron pityodes Zenker, 1833, p. 3, pl. 1, figs. 1-3; coniferous wood; Tertiary (Braunkohle); Altenburg, Germany.

RETINODENDRON Renault, 1892.

Retinodendron rigolotti Renault, 1892a, p. 339; Carboniferous; Autun, France. See also Renault, 1893, pl. 77, figs. 9-14.

RETINOMASTIXIA Kirchheimer, 1938.

Retinomastixia schultei Kirchheimer, 1938b, p. 350, pl. 7, figs. 7-13; seed; Cornaceae; Oligocene; Germany.

RETINOSPORITES Holden, 1915.

Retinosporites indica (Feistmantel) Holden, 1915, p. 221, pl. 11, figs. 1, 4, 9; coniferous twigs with cuticle of foliage preserved, some resemblance to *Retinospora*; Triassic; Rajmahal Hills, India.

RETINOXYLON Endlicher, 1847.

Retinoxylon pityoides (Zenker) Endlicher, 1847, p. 282; coniferous wood; Tertiary?; Altenburg, Saxony. For *Retinodendron pityoides* Zenker, 1833, p. 3, pl. 1, figs. A-D.

RETIOFUCUS Keeping, 1882.

Retiofucus extensus Keeping, 1882, p. 488, pl. 11, figs. 6, 7; alga; Constitution Hill, Aberystwyth, Wales. Earlier citation: Keeping, 1881, p. 152; nom. nud.

RETIPHYCUS Ulrich, 1904.

Retiphyucus hexagonale Ulrich, 1904, p. 139, pl. 18, fig. 5; plant?; Yakutat formation, Lower Jurassic?; Pogibshi Island, opposite village of Kadiak, Alaska.

REUSSIA Presl, 1838.

Reussia scolependrioides (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 125. For *Filicites scolependrioides* Brongniart, 1828a-38, p. 388, pl. 137, figs. 2, 3.

RHABDOCARPOS Goeppert and Berger, 1848.

Rhabdocarpus tunicatus Goeppert and Berger, 1848, p. 20, pl. 1, fig. 8; seed compression; Carboniferous; Charlottenbrunn, Silesia. The spelling *Rhabdocarpus* adopted by later writers.

RHABDOPORELLA Stolley, 1893.

Rhabdoporella bacillum Stolley, 1893, p. 139, pl. 7, figs. 7a-c; siphonaceous alga; Silurian; Holstein, Kiel.

RHABDOSPERMUM Seward, 1917.

Rhabdospermum cyclocarpon Seward, 1917, p. 344, figs. 501C, 501E; Carboniferous.

RHABDOTOCAULON Fliche, 1910.

Rhabdotocaulon zeillertii Fliche, 1910, p. 257, pl. 25, fig. 5; stem compression, incertae sedis; Triassic (Keuper); Suriauville, Vosges, France.

RHACHIOPTERIS Dawson, 1862.

Rhachiopteris pinnata Dawson, 1862, p. 323, pl. 16, fig. 60; fragment of fern? rachis; Devonian; New York.

RHACOGLOSSUM Debey, 1848.

Rhacoglossum heterophyllum Debey, 1848, p. 117; nom. nud.

RHACOPHYLLUM Schimper, 1869.

Rhacophyllum lactuca (Sternberg) Schimper, 1869 (1869-74), p. 684, pl. 46, fig. 1; pl. 47, figs. 1, 2.

RHACOPHYTON Moulton, 1875.

Rhacophyton condrusorum (Crepin) Moulton, 1875, p. 658. For *Psilophyton condrusorum* Crepin, 1874, p. 358, pl. 1; Upper Devonian; Condruz, Belgium.

RHACOPTERIDUM Hirmer, 1940.

Rhacopteridum Hirmer, 1940, p. 50 (not seen, cited in Gothan, 1942b, p. 147).

RHACOPTERIS Schimper, 1869.

Rhacopteris elegans (Ettingshausen) Schimper, 1869 (1869-74), p. 482. For *Asplenites elegans* Ettingshausen, K.-k. geol. Reichsanst. Abh., 1852, Band 1, p. 15, pl. 3, figs. 1-3.

RHAMNACINIUM Felix, 1894.

Rhamnacinium affine Felix, 1894a, p. 88, pl. 8, figs. 3a-d; wood; Rhamnaceae; Eocene; Apscheron, Transcaucasia.

RHAMNITES Forbes, 1851.

Rhamnites multinervatus Forbes, 1851, p. 103, pl. 3, fig. 2; leaf; Miocene; Isle of Mull, Scotland.

RHAMNOSPERMUM Chandler, 1925.

Rhamnospermum bilobatum Chandler, 1925, p. 30, pl. 5, figs. 1a-c; seed; Rhamnaceae?; upper Eocene; Hordle, Hampshire, England.

RHETINANGIUM Gordon, 1912.

Rhetinangium arberi Gordon, 1912, p. 821, pls. 1-3; petrified pteridosperm stem; Calceiferous Sandstone series, Lower Carboniferous; Pettycur, Fife, Scotland.

RHEXOXYLON Bancroft, 1913.

Rhexoxylon africanum Bancroft, 1913, p. 100, pls. 10-11; petrified polystelic stem; Triassic; southern Rhodesia. See also Walton, 1923.

RHINANTHEAEIDES Stiehler, 1861.

Rhinanthaeacides goeppertiana Stiehler, 1861, p. 159.

RHINIPTERIS Harris, 1931.

Rhinipteris concinna (Presl) Harris, 1931b, p. 58, pls. 12, 13; fertile leaf, Marattiaceae; Lepidopteris zone, Rhaetic; Scoresby Sound, east Greenland.

RHIPIDION Zalesky, 1937.

Rhipidion tyrgranum Zalesky, 1937c, p. 136, fig. 19; leaf fragment; incertae sedis; Permian; Russia.

RHIPIDOPSIS Schmalhausen, 1879.

Rhipidopsis ginkgoides Schmalhausen, 1879, p. 50, pl. 8, figs. 3-12; pl. 6, fig. 1; ginkgo phyte? foliage; Permian; Petchoralandes, Russia.

RHIPTOZAMITES Schmalhausen, 1879.

Rhiptozamites goepperti Schmalhausen, 1879, p. 32, pl. 4, figs. 2-4; cordiatean leaves?; Permian; Russia.

RHIZOALNOXYLON Conwentz, 1880.

Rhizoalnoxyton inclusum Conwentz, 1880, p. 38, pl. 8, figs. 33-35; wood; Tertiary; Karlsdorf, Silesia.

RHIZOCALAMOPITYS Solms Laubach, 1896.

Rhizocalamopitys sp. Solms Laubach, 1896, p. 77; Lower Carboniferous; Saalfeld, Prussian Saxony.

RHIZOCARPITES Heer, 1878.

Rhizocarpites singularis Heer, 1878b, p. 15, pl. 3, figs. 20, 21; Marsiliaceae?; Upper Jurassic; Siberia.

RHIZOCAULON Saporta, 1861.

Rhizocaulon macrophyllum Saporta, in Heer, 1861, p. 135; Gramineae?; Eocene; France. See also Saporta, 1862, p. 198, pl. 1, figs. 4a-e.

RHIZOCEDROXYLON Felix, 1882.

Rhizocedroxylon hoheneggeri Felix, 1882a, p. 33, coniferous wood; Tertiary. See also Felix, 1882b, p. 268, pl. 2, fig. 6.

RHIZOCORDAITES Grand'Eury, 1890.

Rhizocordaites sp. Grand'Eury, 1890, p. 314, pl. 7, fig. 12; cordaitan roots; Upper Carboniferous; Gard, France.

RHIZOCUPRESSINOXYLON Conwentz, 1880.

Rhizocupressinoxylon uniradiatum (Goeppert) Conwentz, 1880, p. 25, pls. 1-7; wood; Tertiary; Germany.

RHIZODENDRON Goeppert, 1865.

Rhizodendron oppoliense Goeppert, 1865a, p. 399; tree fern; Cretaceous. See also Stenzel, 1886, p. 5, pl. 1, figs. 1-3, 5-12; pl. 2, figs. 13-19; pl. 3, figs. 20-29; and Posthumus, 1931.

RHIZOLITHES (C. W. Braun) Lesquereux, 1860.

First valid species appears to be: *Rhizolithes palmatifidus* Lesquereux, 1860, p. 313, pl. 5, fig. 9; Pennsylvanian; Frog Bayou, Ark. Original citation: *Rhizolithes cylindricus* Braun, 1847, p. 86; nom. nud.

RHIZOMITES Geyler, 1887.

Rhizomites moenanus Geyler, in Geyler and Kinkelin, 1887, p. 38, pl. 4, fig. 11. Pliocene; Frankfurt am Main.

RHIZOMOPSIS Gotthard and Sze, 1933.

Rhizomopsis gemmifera Gotthard and Sze, 1933, p. 26, pl. 4, fig. 6; rhizome?; Carboniferous; Kiangsu province, China.

RHIZOMOPTERIS Schimper, 1869.

Rhizomopteris lycopodioides Schimper, 1869 (1869-74), p. 699, pl. 49, fig. 2; fern rhizome?; Carboniferous; near Dresden.

RHIZOMORPHITES (Goeppert) Trevisan, 1856.

Rhizomorphites intertextus (Sternberg) Trevisan, in Zigno, 1856 (1856-68), p. 2. For *Alcagites intertextus* Sternberg, 1820-38, p. 37, pl. 21, fig. 6. Earliest citation: *Rhizomorphites geanthracis* Goeppert, 1848, p. 1085; nom. nud. Meschinelli in Saccardo, 1892, p. 802, erroneously attributes this genus to Roth.

RHIZONIUM Corda, 1845.

Rhizonium orchideiforme Corda, 1845, p. 46, pl. 27.

RHIZOPALMOXYLON Felix, 1883.

Rhizopalmoxyton sp. Felix, 1883b, p. 27; palm root; Antigua, West Indies.

RHIZOPALMOXYLON Gothan, 1942.

Rhizopalmoxyton glaseli Gothan, 1942a, p. 13, pl. 1; stump (root zone) of petrified palm; Tertiary (Braunkohle); Bohlen, Germany.

RHIZOPHIDITES Daugherty, 1941.

Rhizophidites triassicus Daugherty, 1941, p. 43, pl. 34, fig. 1; fungus, Chytridiales; Triassic; Arizona.

RHIZOPHORITES Bayer, 1914.

Rhizophorites bornbacaceus Bayer, 1914, p. 56, fig. 28; leaf, Rhizophoraceae; Bohemia.

RHIZOPHOROCARPUS Velenovsky and Viniklar, 1926.

Rhizophorocarpus dekapetalus Velenovsky and Viniklar, 1926, p. 51, pl. 1, fig. 19; fruit, Rhizophoraceae; Cretaceous; Vyserovic, Bohemia.

RHIZOPTERODENDRON Goeppert, 1881.

Rhizopterodendron oppoliense Goeppert, 1881, p. 3; Cretaceous; Oppeln, Silesia.

RHIZOSTAEMIS Reinsch, 1884.

Rhizostaemis sp. Reinsch, 1884, p. 15, pl. 23; Carboniferous; Russia.

RHIZOTAXODIOXYLON Felix, 1882.

Rhizotaxodioxyton palustre Felix, 1882b, p. 278, pl. 2, figs. 2-4; coniferous wood; Quarternary?

RHODEA Presl, 1838.

Rhodea trichomanoides (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 109. For *Sphenopteris trichomanoides* Brongniart, 1828a-38, p. 182, pl. 48, fig. 3. See also Kidston, 1923, p. 223.

RHODEITES Němejce, 1937.

Rhodeites gutbieri (Ettingshausen) Němejce, 1937, p. 6. For *Sphenopteris gutbieri* in Ettingshausen, Die Stein kohlenflora von Radnitz, pl. 19, figs. 1, 2; "Permo-Carboniferous"; Czechoslovakia.

RHODOMELITES Sternberg, 1833.

Rhodomelites strictus (Agardh and Brongniart) Sternberg, 1833 (1820-38), p. 25. For *Fucoides strictus* Agardh and Brongniart, in Brongniart, 1822, p. 237, 239, pl. 3, fig. 3; alga; Lower Cretaceous; Aix, near Rochelle, France.

RHODOMENITES Miquel, 1851.

Rhodomenites marginatus Miquel, 1851a, p. 268; alga; Tertiary.

RHODYMENITES Trevisan, 1858.

Rhodymenites ciliatus (Sternberg) Trevisan, in Zigno, 1858 (1856-58), p. 35. For *Sphaerococcites ciliatus* Sternberg, 1820-38, p. 28, pl. 4, fig. 1.

RHOIDIUM Unger, 1850.

Rhodium juglandinum Unger, 1850a, p. 475; wood, Anacardiaceae; Tertiary; Hungary. First illustrated species: *Rhodium ungeri* Mercklin, 1856, p. 21, pl. 1, figs. 1, 2; pl. 2.

RHOIPITES Wodehouse, 1933.

Rhoipites bradleyi Wodehouse, 1933, p. 513, fig. 45; pollen, Anacardiaceae; Parachure Creek member, Green River formation, Eocene; Colorado and Utah.

RHOIIDITES Robert Potonie, 1950.

Rhooidites pseudocingulum Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 57, pl. B, figs. 41-42; pl. C, figs. 25, 26; pollen, Anacardiaceae?; Miocene and Pliocene.

RHOOPHYLLUM Dusen, 1899.

Rhoophyllum nordenskjoeldi Dusen, 1899, p. 103, pl. 11, fig. 1; leaf fragment, dicotyledon; Oligocene; Río de las Minas near Punta Arenas, Chile.

RHOPALOPHYLLUM Ettingshausen, 1888.

Rhopalophyllum acuminatum (Unger) Ettingshausen, 1888, p. 314, pl. 4, figs. 16-19; leaf; Miocene; Münzenberg, Austria.

RHOPALOSPERMITES Saporta, 1862.

Rhopalospermites strangeaeformis Saporta, 1862, p. 258, pl. 8, fig. 7; seed, compared with *Rhopala* and *Strangea*; Tertiary; Aix, Provence, France.

RHYNCHOGONIOPSIS Neumann, 1907.

Rhynchogoniopsis neocomiensis Neumann, 1907, p. 87, pl. 1, fig. 3; seed?; Wealden; Peru.

RHYNCHOGONIUM Heer, 1876.

Rhynchogonium crassirostre Heer, 1876b, p. 20, pl. 5, figs. 3, 4; leaf fragment, incertae sedis; Carboniferous; Spitzbergen.

RHYNIA Kidston and Lang, 1917.

Rhynia gwynne-vaughani Kidston and Lang, 1917, p. 780, pls. 1-10; Psilophytales; Old Red Sandstone, Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

RHYSSOPHYCUS Eichwald, 1854.

Rhyssophycus embolus Eichwald, 1854, p. 51, alga. See also Eichwald, 1860-68, p. 54, pl. 1a, fig. 4.

RHYTIDOCARYON Mueller, 1876.

Rhytidocaryon wilkinsonii Mueller, 1876, p. 124, pl. 1, figs. 1-3; fruit, Menispermaceae; upper Tertiary; Benere, New South Wales.

RHYTIDODENDRON Boulay, 1876.

Rhytidodendron munitifolium Boulay, 1876, p. 39, pl. 3, fig. 1; Upper Carboniferous; Fresnes, France.

RHYTIDOLEPIS Sternberg, 1822.

Rhytidolepis ocellata Sternberg, 1822 (1820-38), p. 32, pl. 15; Sigillarian stem; Carboniferous.

RHYTIDOPHLOYOS Corda, 1845.

Rhytidophloyos tenuis Corda, 1845, p. 30, pl. 9, fig. 20; lycopod leaf base impression; Carboniferous; Radnitz, Bohemia.

RHYTIDOTHECA Mueller, 1871.

Rhytidotheca lynchii Mueller, 1871 (1871-82), p. 39, pl. 4, fig. 1-8; Pliocene; Hadron, Victoria.

RHYTISMITES Meschinelli, 1892.

Rhytismites palaeoacerinum (Engelhardt) Meschinelli, in Saccardo, 1892, p. 780. For *Rhytisma palaeoacerinum* Engelhardt, 1885, p. 310, pl. 8, figs. 8a-c; Miocene; Kundratitz, Bohemia.

RHYTISMOPSIS Geyler, 1887.

Rhytismopsis sp. Geyler, 1887a, p. 488, pl. 32, fig. 4; fungus; Eocene; Labuan, Borneo.

RHYZODENDRON Zalesky, 1937.

Rhyzodendron rossicum Zalesky, 1937d, p. 159, figs. 9, 10; lycopod stem impression; Permian; Russia.

RIENITSIA Walkom, 1932.

Rienitsia spatulata Walkom, 1932, p. 124, pl. 5, figs. 1, 2; fig. 1. See also Jones and Jersey, 1947, p. 42.

RIMNOCLADON Zalesky, 1930.

Rimnocladon minutum Zalesky, 1930c, p. 227, pl. 1, figs. 7, 8; lycopod? stem impression; Lower Carboniferous; Urals, Russia.

RIVULARITES Fliche, 1905.

Rivularites repertus Fliche, 1905a, p. 47, pl. 3, fig. 4; alga, Cyanophyceae?; Triassic; Gemmelaincourt, Vosges, France.

ROBERTIAE Choubert, 1932.

Robertiae katangae Choubert, in Haquaert, 1932, p. 266; Devonian; Katanga, Belgian Congo.

ROBINIOXYLON Falqui, 1907.

Robinioxylon zuriensis Falqui, 1907, p. 11; wood; Oligocene; Italy.

RODEITES Sahni, 1943.

Rodeites dakshini Sahni, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 180, pl. 9, fig. 42; early Tertiary (probably Eocene); Mohgaon Kalan and Sausar, India.

ROEMERIA Unger, 1852.

Roemeria americana Unger, in Roemer, Ferdinand, 1852, p. 95; wood; Cretaceous; near Gonzales, Tex.

ROGERSIA Fontaine, 1889.

Rogersia longifolia Fontaine, 1889, p. 287, pl. 139, fig. 6; pl. 144, fig. 2; pl. 150, fig. 1; leaf, Proteaceae; Potomac group, Lower Cretaceous; Fredericksburg, Va.

ROHLFSIA Schenk, 1883.

Rohlfsia celastroides Schenk, 1883a, p. 9, pl. 4, fig. 12; wood, dicotyledon; Upper Cretaceous; Libya, North Africa.

ROMEROITES Spegazzini, 1924.

Romeroites argentinensis Spegazzini, 1924b, p. 139, figs. 5, 6; seed-bearing cone, Coniferales; Upper Cretaceous; Patagonia.

RONZOCARPON Marion, 1872.

Ronzocarpum hians Marion, 1872, p. 358, pl. 23, figs. 28, 29; fruit, dicotyledon; Tertiary; Ronzon, France.

ROSELLINITES Meschinelli, 1892.

Rosellinites congregatus (Beck) Meschinelli, in Saccardo, 1892, p. 750; Pyrenomycete; Oligocene; Saxony. For *Rosellina congregata* (Beck) Engelhardt, 1888, p. 33, pl. 1, figs. 1-9.

ROSELLINITES Henry Potonie, 1893.

Rosellinites beyschlagii Henry Potonie, 1893b, p. 27, pl. 1, fig. 8; fungus perithecia; Permian (Rothliegendes); Manebach, Kammerberg, Germany.

ROSENBUSCHIA Sterzel, 1895.

Rosenbuschia schalchi Sterzel, 1895, p. 270, pl. 10, figs. 14-18; alga?; Permian; Oppenau, Baden.

ROSSOVITES Zalessky, 1934.

Rossovites petchorenensis Zalessky, 1934b, p. 289, fig. 77; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.

ROSTHORNIA Unger, 1842.

Rosthornia carinthiaca Unger, 1842b, p. 175.

ROTHENBERGIA Cotta, 1843.

Rotherbergia hollebenii Cotta, 1843, p. 411, pl. 2, fig. D; incertae sedis; Saalfeld, East Prussia.

ROTODONTIOSPERMUM Arnold and Steidtmann, 1937.

Rotodontiospermum illinoense Arnold and Steidtmann, 1937, p. 647, figs. 1, 11-14; petrified seed, Pteridospermae; McLeansboro formation, Pennsylvanian; Richland County, Ill.

ROTTIA Weyland, 1943.

Rottia incerta Weyland, 1943, p. 108, pl. 19, figs. 3-7; leaf, dicotyledon; Tertiary; Rott, Siebengebirge, Germany.

ROTULARIA Sternberg, 1825.

Rotularia marsileaefolia Sternberg, 1825 (1820-38), Tentamen, p. xxxii; *Annularia* foliage; Carboniferous; Swina, Bohemia.

RUBIAEOAEACARPUM Menzel, 1913.

Rubiaceacarpum multicarpellare Menzel, 1913, p. 10, pl. 1, figs. 20-24; fruit, Rubiaceae; Tertiary (Braunkohle).

RUBIAEOACARPUM Kräusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, 47, p. 108 (not seen, cited in Gothan, 1942b, p. 148).

RUBIACITES Weber, 1855.

Rubiacites asperuloides Weber, in Wessel and Weber, 1855, p. 149, pl. 26, fig. 12; Miocene; Rott, Germany.

RUBIAEPHYLLUM Bayer, 1893.

Rubiaephyllum gaylussaciae Bayer, in Fric, 1893, p. 131, fig. 192; Cretaceous (Senonian); Priesen, Bohemia.

RUBIDGEA Tate, 1867.

Rubidgea mackayi Tate, 1867, p. 141, pl. 5, fig. 8; *Glossopteris*-like leaf; Karroo beds, Carboniferous; Bloemkop, near Sunday's River, South Africa.

RUBIIPHYLLITES Hector, 1880.

Rubiiphyllites linearis Hector, 1880, p. 49; nom. nud.

RUBIODES Perkins, 1904.

Rubiodes lignita Perkins, 1904, p. 193, pl. 78, figs. 80, 84; fruit, compared with *Rubia tinctoria* (Rubiaceae); Tertiary; Brandon, Vt.

RUFFORDIA Seward, 1894.

Ruffordia goepperti Seward, 1894a, p. 76, pl. 3, figs. 5, 6; pl. 4; pl. 5, pl. 6, fig. 1; fertile fern foliage, Schizaeaceae?; Wealden; England.

RUSOPHYCUS Hall, 1852.

Rusophycus clavatus Hall, 1852, p. 23, pl. 8, figs. 1a, 1b; plant?; Clinton group, Silurian; New Hartford, Oneida County, N. Y.

RUTAEACARPUS Velenovsky and Viniklar, 1926.

Rutaecarpus quadrilobus Velenovsky and Viniklar, 1926, p. 52, pl. 1, fig. 9; fruit, Rutaceae?; Cretaceous; Otruby, Bohemia.

RUTAPHYLLUM E. W. Berry, 1930.

Rutaphyllum trifoliatum E. W. Berry, 1930, p. 92, pl. 42, fig. 3; leaf, Rutaceae; Grenada formation, lower Eocene; 1 mile north of Somerville, Fayette County, Tenn.

RUYSCHIOXYLON, Hermann Hofmann, 1844.
Ruyischioxylon sumatrense Hermann Hofmann, 1884b, p. 32; wood; Tertiary; Sumatra.

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SAARODISCITES Hirmer, 1940.
Palaeontographica, 1940, Supp. 9, p. 13 (not seen, cited in Gothan, 1942b, p. 148).

SAAROPTERIS Hirmer, 1940.
Palaeontographica, 1940, Supp. 9, p. 37 (not seen, cited in Gothan, 1942b, p. 148).

SABALITES Saporta, 1865.
Sabalites oxyrhachis Saporta, 1865, p. 82, pl. 3, fig. 3; palm leaf fragment; Tertiary; St.-Jean-de-Garguier, France.

SABALOIDITES Robert Potonie, 1950.
Sabaloidites areolatus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. B, figs. 1, 2; pl. C, fig. 15; pollen, Palmaceae; Miocene; Chatt-Aquitain, Germany.

SABIOCAULIS Stopes and Fujii, 1910.
Sabiocaulis sakuraii Stopes and Fujii, 1910, p. 66, pl. 8, fig. 54; pl. 9, figs. 55-57; petrified stem, Sabiaceae; Upper Cretaceous; Hokkaido, Japan.

SABIOXYLON Madler, 1939.
Sabioxylon francofurtense Madler, 1939, p. 120, pl. 12, figs. 1-7; wood, Sabiaceae; Pliocene; near Niederrad, Germany.

SABULIA Stopes, 1913.
Sabulia scottii Stopes, 1913, p. 93, pl. 6, fig. 2; pl. 8, fig. 9; wood, dicotyledon; Lower Greensand, Lower Cretaceous; Woburn Sands, Bedfordshire, England.

SACCHAROMYCETES Gruss, 1928.
 Preuss. geol. Landesanst. Jahrb., 1928, Band 49, p. 1046 (not seen, cited in Gothan, 1942a, p. 148).

SACCOPHYCUS U. P. James, 1879.
Saccophycus intortus U. P. James, 1879, p. 17; Lower Silurian; near Lebanon, Ohio.

SACCOPTERIS Stur, 1883.
Sacopteris essinghi (Andrae) Stur, 1883, p. 696, fig. 18; fern?; sporangia.

SACHEOCLADUS Zalesky, 1937.
Palaeophytographica, Moskau-Leningrad, 1937, p. 21 (not seen, cited in Gothan, 1942b, p. 148).

SACHERIA, Ettlingshausen, 1852.
Sacheria asplenioides Ettlingshausen, 1852a, p. 40, pl. 20, fig. 1; fertile fern foliage; Radnitz, Bohemia.

SACHYOGYRUS Zalesky, 1939.
Sachygyrus multifarius Zalesky, 1939b, p. 336, figs. 7, 8; articulate cone; Permian; Matveyevo, Krasnaia Glinka, USSR.

SAGENARIA Brongniart, 1822.
Sagenaria coelata Brongniart, 1822, p. 224, pl. 12, fig. 6; a *Lepidodendron* stem impression; Carboniferous.

SAGENOPTERIS Presl, 1838.
Sagenopteris nilssoniana (Brongniart) Ward; this species designated as the type by Harris, 1932b, p. 5. For *Fili-cites nilssoniana* Brongniart, 1825b, p. 218, pl. 12, fig. 1. [First species designated is *S. rhoifolia* Presl, in Sternberg, 1838 (1820-38), p. 165, pl. 35, fig. 1.]

SAHNIANTHUS Shukla, 1944.
Sahnianthus parijai (Sahni) Shukla, 1944, p. 2, pls. 1-8; petrified flower, Lythra-ceae; base of Intertrappean series, Tertiary; Mohgaon Kalan, Chhindwara district, Central Provinces, India.

SAKRISTROBUS K. Jacob, 1943.
Sakristrobus sahnii K. Jacob, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 177, figs. 9, 10; Jurassic; Sakrighalighat, India.

SALICINIUM Unger, 1850.
Salicinium populinum Unger, 1850a, p. 420; wood, Salicaceae. Only species illustrated: *S. messinianum* Pampaloni, 1904, p. 545, figs. 10, 11.

SALICINOXYLON Kaiser, 1880.
Salicinoxylon miocenicum Kaiser, 1880b, p. 511; wood, Salicaceae; probably Mio-cene; Island of Sylt, Prussia.

SALICINOXYLON Lingnier, 1907.
Salicinoxylon biradiatum Lingnier, 1907, p. 272, pl. 18, figs. 18-24; wood, dico-tyledon; Upper Cretaceous (Cenoma-nian); Hève, France.

SALICIPHYLLUM Conwentz, 1886.
Saliciphyllum succineum Conwentz, 1886, pl. 4, figs. 17-19; leaf, in amber, Sali-caceae; Tertiary; West Prussia.

SALICIPHYLLUM Fontaine, 1889.
Saliciphyllum longifolium Fontaine, 1889, p. 302, pl. 150, fig. 12; leaves, compared with *Salix*; Potomac group, Lower Cre-taceous; near Potomac Run, Va.

SALICITES Hisinger, 1837.
Salicites wahlbergii Hisinger, 1837, p. 112, pl. 34, fig. 9; leaf dicotyledon; Scania, Sweden.

SALICOIDITES Robert Potonie, 1950.
Salicoidites sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thier-gart, Friedrich, 1950, p. 50, pl. B, fig. 3; pollen, Salicaceae?; upper Pliocene; Chatt-Aquitain, Germany.

SALICORNITES Principi, 1926.
Salicornites massalongoi Principi, 1926, p. 64, pl. 2, figs. 8, 9. Earlier citation: Principi, 1921b, p. 90; nom. nud.

SALPINGOPORELLA Pia, 1918.
Salpingoporella mühlbergii (Lorenz) Pia, 1918, p. 211, fig. 4a; alga, Dasyclada-ceae; Eocene; Radstadt, Austria.

SALPINGOSTOMA Gordon, 1941.

Salpingostoma dasu Gordon, 1941, p. 447, pls. 1-6; pteridosperm seed; Cementstone group, lower part of Calceiferous Sandstone series, Lower Carboniferous; Oxroad Bay, Tantallon, East Lothian, Scotland.

SAMARAVECTIS Reid and Chandler, 1926.

Samaravectis ovalis Reid and Chandler, 1926, p. 142, pl. 9, figs. 14-16; winged fruit, compared with fruits of Polygonaceae, Ulmaceae, Urticaceae; Bembridge marl, Oligocene; Isle of Wight, England.

SAMAROPSIS Goeppert, 1864.

Samaropsis ulmiformis Goeppert, 1864, p. 177, pl. 28, figs. 10, 11; winged seed; Permian; Braunau, Bohemia.

SAMAROSPERMUM E. A. N. Arber, 1914.

Samarospermum moravicum (Helmhacker) E. A. N. Arber, 1914, p. 99, pl. 6, figs. 19, 20; winged seed; Middle Coal Measures, Upper Carboniferous; Kent coalfield, England.

SAMBUCOIDITES Thomson, 1950.

Sambucoidites sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62, pl. B, fig. 63; pollen, Caprifoliaceae; Pliocene; Chatt-Aquitain, Germany.

SANTALIAPHYLLITES Hector, 1880.

Santaliaphyllites maireoides Hector, 1880, p. 49; nom. nud.

SAPINDIPHYLLUM Nathorst, 1888.

Sapindiphyllum dubium Nathorst, 1888, p. 212, pl. 22, fig. 5; leaf, compared with *Sapindus* (Sapindaceae); Tertiary; Tanagori, Musashi province, Japan.

SAPINDOIDEA Kirchheimer, 1936.

Sapindoidea margaritifera (Ludwig) Kirchheimer, 1936b, p. 89, pl. 9, figs. 1a-f; seed, Sapindaceae; Tertiary (Braunkohle); Salzhause, Germany.

SAPINDOIDES Perkins, 1904.

Sapindoides varius Perkins, 1904, p. 206, pl. 81, figs. 116, 117, 122; fruit; Tertiary; Brandon, Vt.

SAPINDOPHYLLUM Ettingshausen, 1886.

Sapindophyllum spinulosodentatum Ettingshausen, 1886, p. 26, pl. 46, fig. 27; leaf, Sapindaceae; Miocene; Kutschlin, Bohemia.

SAPINDOPSIS Fontaine, 1889.

Sapindopsis cordata Fontaine, 1889, p. 296, pl. 147, fig. 1; leaf fragment, compared with *Sapindus* (Sapindaceae); Potomac group, Lower Cretaceous; Fredericksburg, Va.

SAPINDOSPERMUM Reid and Chandler, 1933.

Sapindospermum ovoideum Reid and Chandler, 1933, p. 371, pl. 18, figs. 1-5, seed, Sapindaceae; London Clay, Eocene; Herne Bay, Kent, England.

SAPINDOSTROBUS Ettingshausen, 1887.

Sapindostrobus dubius Ettingshausen, 1887a, p. 137, pl. 15, fig. 38; incertae sedis; Eocene; Vegetable Creek, near Emmaville, New South Wales.

SAPINDOXYLON Kräusel, 1922.

Sapindoxyton janssonii Kräusel, 1922, p. 124, pl. 1, fig. 9; pl. 2, fig. 3; pl. 3, fig. 6; pl. 5, fig. 5; wood, Sapindaceae; Miocene; Sumatra.

SAPORTAEA Fontaine and White, 1880.

Saportaea salisburyoides Fontaine and White, 1880, p. 102, pl. 38, figs. 1-3; roof shale of Waynesburg coal; Pennsylvanian; Cassville, W. Va.

SAPORTAIA Seward, 1895.

See note under *Withania armata* (Saporta) Seward.

SAPORTIA Squinabol, 1891.

Saportia striata Squinabol, 1891b, p. xx, pl. D, fig. 8; pl. E; alga?; Tertiary; Liguria, Italy.

SAPOTACITES Ettingshausen, 1853.

Sapotacites sideroxyloides Ettingshausen, 1853, p. 61, pl. 21; fig. 21; leaf, Sapotaceae; Eocene; Haering, Tirol, Austria.

SAPOTAPHYLITES Hector, 1880.

Sapotaphyllites linearis Hector, 1880, p. 49; nom. nud.

SAPOTEITES Andrae, 1855.

Sapoteites ackneri Andrae, 1855, p. 19, pl. 3, fig. 8; leaf, Sapotaceae; Miocene; Szakadat, Transylvania.

SAPOTICARPUM Reid and Chandler, 1933.

Sapoticarpum rotundatum Reid and Chandler, 1933, p. 467, pl. 26, figs. 24-30; fruit, Sapotaceae; London Clay, Eocene; Sheppey, Kent, England.

SAPOTISPERMUM Reid and Chandler, 1933.

Sapotispermum sheppeyense Reid and Chandler, 1933, p. 471, pl. 27, figs. 1, 2; seed, Sapotaceae; London Clay, Eocene; Sheppey, Kent, England.

SAPOTOPHYLLUM Velenovsky, 1889.

Sapotophyllum obovatum Velenovsky, 1889, p. 54. For *Sapotacites obovata* Velenovsky, 1884, p. 3, pl. 3, fig. 6; Upper Cretaceous; Kuchelbad, Bohemia.

SAPOTOXYLON Felix, 1882.

Sapotoxylon gümbelii Felix, 1882a, p. 54; wood, Sapotaceae?; Quarternary; Waghshofen near Neuberg. See also Felix, 1883a, p. 67, pl. 2, figs. 5, 8.

SARCOPTERIS Renault, 1883.

Sarcopteris bertrandi Renault, 1883a, p. 129, pl. 21, figs. 12-15; petrified fertile pectopterid foliage; Upper Carboniferous.

SARCOSPERMUM Deevers, 1937.

Sarcospermum ovale Deevers, 1937, p. 580, figs. 27-36; petrified seed, Trigonocarpaceae; Pennsylvanian; Wilmington, Ill.

SARCOSTROBILUS Fliche, 1900.

Sarcostrobus paulini Fliche, 1900, p. 23, pl. 1, figs. 2-5; petrified cone, Araucariaceae; Cretaceous; France.

SARCOTAXUS Brongniart, 1874.

Sarcotaxus angulosus Brongniart, 1874, p. 248, pl. 21, fig. 16; silicified seed; Carboniferous; St.-Étienne, France.

SARDOA Krasser, 1920.

Sardoa robitschekii Krasser, 1920, p. 21; Jurassic; Sardinia.

SARDYKPHYLLUM Zalesky, 1929.

Sardykphyllum crassinervosum Zalesky, 1929c, p. 688, fig. 14; *Sphenophyllum*? leaf; Permian; Bolchoi Sardyk, Republic Tatar, Russia.

SARGASSITES Sternberg, 1833.

Sargassites septentrionalis (Agardh) Sternberg, 1833 (1820-38), p. 36. For *Sargassum septentrionale* Agardh, see Brongniart, 1828a-38, p. 50, pl. 2, fig. 24; alga?; Upper Carboniferous; Högnäs, Sweden.

SAUROPTERIS Tschirkova, 1937.

Saropteris rossica Tschirkova, 1937, p. 244, fig. 12; sphenopteridlike fertile foliage; Carboniferous; Bredy, Russia.

SASSAFROPHYLLUM Velenovsky, 1889.

Sassafraphyllum acutilobum (Lesquereux) Velenovsky, 1889, p. 58. For *Sassafras acutilobum* Lesquereux, 1874, p. 79, pl. 14; Upper Cretaceous; Kansas.

SAURUOPSIS Stopes and Fujii, 1910.

Sauruopsis niponensis Stopes and Fujii, 1910, p. 58, pl. 7, figs. 42-47; stem, Saururaceae; Upper Cretaceous; Hokkaido, Japan.

SAUSAROSPERMUM Sahni and Srivastava, 1940.

Sausarospermum fermori Sahni and Srivastava, in Sahni, 1940, p. 14, pl. 3, fig. 12. See also Sahni and Srivastava, 1934, p. 318; petrified seed; Deccan Intertrappean series; Tertiary; Sausar, India.

SAXEGOTHOPSIS Dusen, 1899.

Saxegothopsis fuegianus Dusen, 1899, p. 105, pl. 11, fig. 10; leaf, Podocarpaceae; Oligocene; Barancas de Carmen Sylva, Chile.

SAXIFRAGACEAECARPUM Menzel, 1913.

Saxifragaceacarpum bifolliculare Menzel, 1913, p. 32, pl. 4, figs. 7-10; fruit, Saxifragaceae; Tertiary (Braunkohle); Germany.

SAXIFRAGISPERMUM Reid and Chandler, 1933.

Saxifragispermum spinosissimum Reid and Chandler, 1933, p. 245, pl. 8, figs. 30-35; fruit, Saxifragaceae; Lendon Clay, Eocene; Sheppey, Kent, England.

SAXIFRAGITES Ettingshausen, 1868.

Saxifragites crenulatus Ettingshausen, 1868a, p. 7, pl. 41; figs. 1-3; leaf, Saxifragaceae?; Miocene; Kutschlin, Bohemia.

SBOROMIRSKIA Zalesky, 1936.

Sboromirska asiatica Zalesky, 1936a, p. 234, fig. 18; coniferous? foliage; Carboniferous; Russia.

SCALITES Reinsch, 1881.

Scalites sp. Reinsch, 1881, p. 74, pl. 17b, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

SCAPANITES Gottsche, 1886.

Scapanites acutifolius Gottsche, 1886, p. 122; nom. nud.

SCAPANOPHYLLUM Zalesky, 1929.

Scapanophyllum sitzense Zalesky, 1929b, p. 133, fig. 14; fern? pinnule; Permian; Sitsa village near Vladivostok.

SCAPHIDOPTERIS Renault, 1883.

Scaphidopteris gillioti Renault, 1883, p. 128, pl. 22, figs. 5-7; petrified pinnules compared with *Pecopteris*; Upper Carboniferous; Peronnière, France.

SCAPINA Pocta, 1889.

Scapina cambrica Pocta, 1889, p. 429, fig. 10 [unnumbered plate]; Cambrian; Příbram, Bohemia.

SCHAFARZIKIA Tuzson, 1914.

Schafarzikia oligocaenica Tuzson, 1914, p. 251, pl. 19, fig. 1; leaf fragment; upper Oligocene; Zsll valley, near Petrozsény, Hungary.

SCHAFFERIA Fucini, 1938.

Palaeontographia Italica, 1938, app. 2, p. 133 (not seen, cited in Gothan, 1942b, p. 149).

SCHAFHAUTLIA Naegeli, 1863.

Schafhautlia teisenbergensis Naegeli, in Schafhautl, 1863, p. 29, pl. 65, figs. 1, 2; wood, dicotyledon; Upper Cretaceous; Tiesenberg, South Bavaria.

SCHIDOLEPIUM Heer, 1880.

Schidolepium gracile Heer, 1880a, p. 27, pl. 8, figs. 6-12; cone, Coniferales; Jurassic; Siberia.

SCHILDERIA Daugherty, 1934.

Schilderia adamanica Daugherty, 1934, p. 363, pl. 5; petrified wood; Triassic; Arizona.

SCHIMPERITES Schleiden, 1855.

Schimperites leptotichus Schleiden, in Schmid and Schleiden, 1855, p. 42; Tertiary; Libethen, Hungary; nom. nud.

SCHISTOSTACHYUM Schenk, 1864.

Schistostachyum thyrsoides Schenk, 1864, p. 110, pl. 6, figs. 3a, 3b; Upper Triassic (Keuper); Estenfeld, Bavaria.

SCHIZAEITES Henry Potonie, 1893.

Schizaeites angustus Henry Potonie, 1893a, p. 161, pl. 20, fig. 4; fern leaf fragment; Permian; Manebach, Prussian Saxony.

SCHIZAEOPSIS E. W. Berry, 1911.

Schizaeopsis expansa (Fontaine) E. W. Berry, 1911c, p. 194, pl. 12; compared with *Schizaea*; Patuxent formation, Lower Cretaceous; Fredericksburg, Va.

SCHIZAEOPTERIS Stopes and Fujii, 1910.

Schizaeopteris mesozoica Stopes and Fujii, 1910, p. 10, pl. 2, fig. 1; sporangia, Schizaeaceae; Upper Cretaceous; Hokkaido, Japan.

SCHIZEITES Guembel, 1859.

Schizeites dichotomus Guembel, 1859a, p. 101, fig. 7; incertae sedis; Permian; Steinbruch, near Erbdorf, Bavaria.

SCHIZODENDRON Eichwald, 1860.

Schizodendron tuberculatum Eichwald, 1860, p. 266, pl. 18, fig. 10; fern stem?; Permian; Bjelebei, Orenbourg, Russia. Generic name cited in Mercklin, 1856, p. 81; nom. nud.

SCHIZOLEPIDELLA Halle, 1913.

Schizolepidella gracilis Halle, 1913, p. 90, pl. 9, figs. 18-21; liverwort?; Jurassic; Hope Bay, Graham Land.

SCHIZOLEPIS C. F. W. Braun, 1847.

Schizolepis liasokeuperinus C. F. W. Braun, 1847, p. 86; cone scales, Abietineae; Triassic. Later described as *Schizolepis braunii* Schenk, 1867 (1865-67), p. 179, pl. 44, figs. 1-8. See also Seward, 1919, p. 439.

SCHIZONEURA Schimper and Mougeot, 1844.

Schizoneura paradoxa Schimper and Mougeot, 1844, p. 50, pls. 24-26; articulate stems and foliage; Mulhouse, Germany.

SCHIZONEUROPSIS Richter, 1906.

Schizoneuropsis posthuma Richter, 1906 (1906-09), p. 13, pl. 6, fig. 10; Lower Cretaceous; Quedlinburg, Prussian Saxony.

SCHIZONEUROPSIS Yabe and Shimakura, 1940.

Schizoneuropsis tokuadi Yabe and Shimakura, 1940, p. 177, pl. 15; some similarity to *Schizoneura*; Permian; Huainan coal mines, Anhwei province, China.

SCHIZOPODIUM Morière, 1888.

Schizopodium renaulti Morière, 1888, p. 133, pls. 1, 2; petrified cycadophyte trunk; Lower Jurassic (Lias); Montignu, France.

SCHIZOPODIUM Harris, 1929.

Schizopodium davidi Harris, 1929, p. 408, pls. 91-93; petrified stem intermediate in anatomy between *Asteroxylon* and *Cladoxylon*; Burdekin beds, Middle Devonian; Burdekin basin, Queensland.

SCHIZOPTERIS Brongniart, 1828.

Schizopteris anomala Brongniart, 1828b, p. 63; fern frond compared with *Schizea* and certain *Asplenium* species; Carboniferous. See also Brongniart, 1828a-38, p. 384, pl. 135.

SCHIZOSPERMUM E. A. N. Arber, 1914.

Schizospermum noeggerathi (Sternberg) E. A. N. Arber, 1914, p. 103, pl. 8, figs. 48-50; Upper Carboniferous; south Wales and south England.

SCHIZOSTACHYS Grand'Eury, 1877.

Schizostachys frondosus Grand'Eury, 1877, p. 201, pl. 17, fig. 3; coenopterid fern fructification; Carboniferous; France. [The name *Androstachys frondosus* Grand'Eury appears on the plate.]

SCHIZOXYLON Unger, 1856.

Schizoxylon taeniatum Unger, 1856, p. 180, pl. 12, fig. 8; regarded as identical with *Cladoxylon* (see discussion in Seward, 1917, p. 200); Upper Devonian; Saalfeld, Thuringia.

SCHLEIDENITES Unger, 1842.

Schleidenites compositus Unger, in Endlicher, 1842, p. 102; wood, incertae sedis; Tertiary; Hungary.

SCHLOTHEIMIA Sternberg, 1822.

Schlotheimia arborescens Sternberg, 1822 (1820-38), p. 32; *Asterophyllites* foliage; Carboniferous. For *Casuarinites equisetiformis* Schlotheim, 1820, pl. 2, fig. 3; pl. 1, fig. 1.

SCHMIDITES Schleiden, 1855.

Schmidites vasculosus Schleiden, in Schmid and Schleiden, 1855, p. 39; wood, Leguminosae?; Tertiary (Braunkohle); Tapolesan, Hungary.

SCHMIEDELIOPSIS Felix, 1882.

Schmiedeliopsis zirkelii Felix, 1882a, p. 72; wood; Antigua, West Indies. See also Felix, 1883, p. 16, pl. 2, figs. 6, 8; pl. 3, fig. 9.

SCHOINOPHYTUM Jaeger, 1851.

Schoinophytum contortum Jaeger, in Stizenberger, 1851, p. 43; nom. nud.; Jurassic; Mundelfinger, Baden.

SCHOPFIA Janssen, 1940.

Schopfia deueli Janssen, 1940, p. 102, pl. 28, figs. 5, 6; incertae sedis; coal No. 2, Pennsylvanian; Mazon Creek, Ill.

SCHOPFIASTRUM Andrews, 1945.

Schopfistrum decussatum Andrews, 1945, p. 334, pl. 10, figs. 17, 18; pl. 11, figs. 20-22; pl. 15, fig. 36; petrified stem, Pteridospermae, affinities with *Rhetinangium*; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

SCHOPFITES Kosanke, 1950.

Schopfites dimorphus Kosanke, 1950, p. 52, pl. 13, figs. 1-3; spore; No. 2 coal, Pennsylvanian; Franklin County, Ill.

SCHULZOSPORA Kosanke, 1950.

Schulzospora rara Kosanke, 1950, p. 53, pl. 13, figs. 5-8; Battery Rock coal, Pennsylvanian; Hardin County, Ill.

SCHUTZIA H. B. Geinitz, 1863.

Schutzia anomala H. B. Geinitz, 1863, p. 525, pl. 6, figs. 1-3; inflorescence, Cordaitales; Carboniferous; Ottendorf, near Braunau, Bohemia.

SCIADIPTERIS Sternberg, 1838.

Sciadipteris radnicensis Sternberg, 1838 (1820-38), p. 118, pl. 37, fig. 1; fern-like foliage; Upper Carboniferous; Brzas, near Radnitz, Bohemia.

SCIADISCA Zalessky, 1934.

Sciadisca petchorensis Zalessky, 1934b, p. 271, fig. 49; incertae sedis; Permian; Pechora basin, Russia.

SCIADOPHYTON Kräusel and Weyland, 1930.

Sciadophyton steinmanni Kräusel and Weyland, 1930, p. 220.

SCIADOPITYOXYLON Schmalhausen, 1879.

Sciadopityoxylon vestuta Schmalhausen, 1879, p. 40; wood, affinities with *Sciadopitys* (Taxodiaceae); Jurassic; Halbinsel, Mangyschlag, Russia. First? illustrated species: *Sciadopityoxylon wettsteini* Jurasky, 1928, p. 258, figs. 1-5.

SCIADOPITYTES Goeppert and Menge, 1883.

Sciadopitytes linearis Goeppert and Menge, 1883, p. 36, pl. 13, figs. 117-119; *Sciadopitys*-like leaves; middle Miocene; Samland, Baltic Prussia.

SCIRPITIS Dusen, 1908.

Scirpitis sp. Dusen, 1908, p. 16; leaf fragment, compared with *Scirpus* (Cyperaceae); Tertiary; Seymour Island, Antarctic Ocean.

SCITAMINITES Sternberg, 1825.

Scitaminites musaeiformis Sternberg, 1825 (1820-38), Tentamen, p. xxxvi, pl. 5, fig. 2; incertae sedis; Upper Carboniferous; Radnitz, Bohemia.

SCITAMINORPHYTON Massalongo, 1858.

Scitaminophyton meneghinianum Massalongo, 1858b, p. 783; leaf, Scitamina-ceae?; Oligocene; Ronca, Italy.

SCLEROPHYLLINA Heer, 1864.

Sclerophyllina furcata Heer, 1864, p. 55, pl. 2, fig. 9; fern?; Upper Triassic (Keuper); Switzerland.

SCLEROPHYLLOIDES Heer, 1862.

Sclerophylloides furcatus Heer, in Muller, 1862, p. 54; nom. nud.

SCLEROPTERIDIUM Heer, 1877.

Scleropteridium dahlianum Heer, 1877a, p. 12, pl. 1, fig. 1; fern? foliage; Jurassic; Andö, Norway.

SCLEROPTERIS Saporta, 1872.

Scleropteris pomelii Saporta, 1872a-73, p. 370, pl. 46, fig. 1; pl. 47, figs. 1, 2; fern foliage; Jurassic; near Verdun, France.

SCLEROPTERIS H. N. Andrews, 1942.

Scleropteris illinoiensis H. N. Andrews, 1942, p. 3, pls. 1-3; rhizome, closely related to *Botrychioxylon*; coal No. 6, Pennsylvanian; Pyramid coal mine, Pinckneyville, Ill.

SCLEROTHAMNIUM Airoidi, 1936.

Sclerothamnium nitens Airoidi, 1936, p. 18, figs. 1, 2, 4; alga; Middle Triassic; northern Italy.

SCLEROTITES Meschinelli, 1892.

Sclerotites acericola (Heer) Meschinelli, in Saccardo, 1892, p. 803. See also Meschinelli, 1898, p. 98, pl. 26, fig. 10.

SCOLECOLITHUS Goeppert, 1852.

Scolecolithus linearis (Haldemann) Goeppert, 1852b, p. 101. For *Skolithos linearis* Haldemann, 1840, p. 3; Cambrian; Reading, Pa. Goeppert refers to Paleontology of New York, Albany, 1847, v. 1, p. 2, pl. 1, fig. 1.

SCOLECOPERIS Zenker, 1837.

Scolecopteris elegans Zenker, 1837, p. 509, pl. 10; fern foliage, fertile, Marattiaceae; Permian; Chemnitz, Germany.

SCOLITHUS Hall, 1847.

Scolithus linearis Hall, 1847, p. 2, pl. 1, figs. 1a-c; plant?; Potsdam sandstone, Upper Cambrian; Adams, Mass., New Jersey, Pennsylvania, etc.

SCOLOPENDRITES Goeppert, 1836.

Scolopendrites jussieuvi Goeppert, 1836, p. 276; fertile fern frond. For *Filicites scolopendroides* Brongniart, 1828d, p. 443, pl. 18, fig. 2; Triassic; Alsace-Lorraine. See also Brongniart, 1836 (1828a-38), p. 388, pl. 137, figs. 2, 3.

SCOLOPENDRITES Lesquereux, 1854.

Scolopendrites grossedentata Lesquereux, in Lesquereux and Rogers, 1854, p. 425; Pennsylvania. See also Rogers, 1858, p. 868, pl. 8, fig. 7.

SCOLOPIOIDEA Langeron, 1899.

Scolopioidea palaecenica Langeron, 1899, p. 454, pl. 2, fig. 4; leaf, compared with *Scolopia*, Bixaceae; Eocene; Sézanne, France.

SCORESBYA Harris, 1932.

Scoresbya dentata Harris, 1932a, p. 38, pls. 2, 3; leaf, related to *Sagenopteris*?; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

SCOTTIELLA Schuster, 1931.

A generic name proposed for *Medullosa anglica*, *M. pusilla*, and *M. centroflis*. See Schuster, 1931, p. 235.

SCOUGOUPHYTON Henri and Geneviève Termier, 1950.

Scougouphyton abdallahense Henri and Geneviève Termier, 1950, p. 206, figs. 49-52; Devonian; Dechra Ait Abdallah, Central Morocco.

SCOYENIA David White, 1929.

Scoyenia gracilis David White, 1929, p. 115, pl. 4, fig. 3, pl. 5; probably not plant; lower Hermit shale, Permian; Arizona.

SCROPHULARINA Heer, 1859.

Scrophularina oblita Heer, 1859, p. 17, pl. 103, fig. 17; calyx?, Scrophulariaceae; Tertiary; Oeningen, Switzerland.

SCUTCORDAITES Renault and Zeiller, 1885.

Scutocordaites grand'euryi Renault and Zeiller, 1885, p. 869; stem and foliage, Cordaitales; Upper Carboniferous; Commeny, France. *See also* Renault and Zeiller, 1890, p. 605, pl. 63, fig. 6.

SCYTOPHYLLUM Bornemann, 1856.

Scytopyllum bergeri Bornemann, 1856, p. 75, pl. 7, figs. 1-6; fernlike leaf fragment; Keuper?; Mülhausen, Germany.

SEDGWICKIA Goeppert, 1848.

Sedgwickia yuccoides Goeppert, in Bronn, 1848, p. 1131. For *Endogenites erosa* Stokes and Webb, 1824, p. 423, pl. 46, figs. 1, 2; pl. 47, figs. 5a, 5b; Wealden; Tilgate Forest, Sussex, England. *See also* Read and Brown, 1937, p. 106.

SEDITES H. B. Geinitz, 1842.

Sedites rabenhorstii H. B. Geinitz, 1842 (1839-42), p. 97, pl. 24, fig. 5; leaves and stem, compared with *Sedum*, Crassulaceae.

SELAGINELLITES Zeiller, 1906.

Selaginellites suissei Zeiller, 1906, p. 141, pl. 39, figs. 1-5; pl. 40, figs. 1-10; pl. 41, figs. 4-6; fertile lycopod shoot; Permian; Blanz, France.

SELAGINITES Brongniart, 1828.

Selaginites patens Brongniart, 1828b, p. 84; lycopod foliage shoots; Carboniferous. *See also* Brongniart, 1838 (1828a-38), p. 68, pl. 26.

SELENOCARPUS Schenk, 1866.

Selenocarpus münsterianus Schenk, 1866, p. 89, pl. 22, figs. 1-6; fertile fern, Gleicheniaceae; Rhaetic; Strullendorf and Reindorf, near Bamberg, Bavaria.

SELENOCHLAENA Corda, 1845.

Selenochlaena microrrhiza Corda, 1845, p. 81. For *Tubicaulis dubius* Cotta, 1832, p. 25, pl. 1, figs. 3, 4. *See also* Posthumus, 1931.

SELENOPTERIS Corda, 1845.

Selenopteris radnicensis Corda, 1845, p. 84, pl. 52; coenopterid petiole?; Carboniferous; Radnitz, Bohemia. *See also* Posthumus, 1931.

SEMAPTERIS Unger, 1870.

Semapteris carinthiaca Unger, 1870, p. 788, pl. 3, fig. 1; partly decorticated lycopod? stem; Upper Carboniferous; Carinthia, Austria-Hungary.

SEMECARPITES Fritel, 1912.

Semecarpites linearifolius Fritel, 1912, p. 643, pl. 22, fig. 1; leaf, compared with *Semecarpus* (Anacardiaceae); Oligocene (Aquitaniens); Bois d'Asson, France.

SEMEN Velenovsky and Viniklar, 1927.

Semen trigonum Velenovsky and Viniklar, 1927, p. 43, pl. 14, fig. 9; seed, incertae sedis; Cretaceous; Slivenec, Bohemia.

SENDELIA Goeppert and Berendt, 1845.

Sendelia ratzeburgiana Goeppert and Berendt, in Berendt, 1845, p. 81, pl. 5, figs. 18-20; staminate flower; Miocene; Prussia.

SENFTENBERGIA Corda, 1845.

Senftenbergia elegans Corda, 1845, p. 91, pl. 57, figs. 1-6; fertile foliage, Schizaeaceae; Carboniferous; Nachod, Bohemia. *See also* Radforth, 1938, 1939.

SEQUIOIDITES Thiergart, 1950.

Sequoioidites polyformosus Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. A, figs. 20, 21; pl. C, fig. 8; pollen, compared with *Sequoia*, *Metasequoia*; Miocene-Pliocene; Chatt-Aquitani, Germany.

SEQUIOIPSIS Saporta, 1876-84.

Sequoiopsis buvignieri Saporta, 1876-84, p. 540, pl. 201, figs. 1-5; twigs, foliage, Coniferales; Jurassic; Creue, near St. Mihiel, France.

SEQUIOIOXYLON Torrey, 1923.

Sequoioxylon montanense Torrey, 1923, p. 74, pl. 10, figs. 19-23; wood, Coniferales; Laramie formation, Upper Cretaceous; bank of Missouri River, Culbertson, Mont.

SEQUIOIOXYLON Yusui, 1928.

Sequoioxylon hondoense Yusui, 1928, p. 420, pl. 17, figs. 59-63; wood, compared with *Sequoia*; upper Tertiary; Aichi coalfield, central Japan.

SEQUIOITES.

See Sequoites.

SEQUIOTES Brongniart, 1849.

Type species?: *Sequoiites taxiformis* (Unger) Brongniart, 1849, p. 117. For *Cupressites taxiformis* Unger, 1842, (1841-47), p. 18, pls. 8, 9; foliage, cones Coniferales; Haering. Spelling *Sequoiites* adopted by some authors.

SERENOPSIS Hollick, 1893.

Serenopsis kempii Hollick, 1893b, p. 169, pl. 149; palm leaf; Cretaceous; Glen Cove, Long Island, N. Y.

SESTROSPHAERA Pia, 1920.

Sestrosphaera liasina Pia, 1920, p. 138, pl. 7, figs. 27, 28; alga, Siphonaceae Verticillatae; Jurassic; Italy.

SETOSISPORITES Ibrahim, 1933.

Setosisporites subpilosus Ibrahim, 1933, p. 27, pl. 5, fig. 40; spore; Carboniferous. [Ibrahim cites *S. hirsutus* as the type species, but I find no record of an illustration. The first species illustrated in his work is *S. subpilosus*.]

SEWARDIA Zeiller, 1900.

Sewardia latifolia Zeiller, 1900, p. 233, fig. 160. For *Withamia saportae* Seward, 1895, p. 174, pl. 2, figs. 1, 2; pl. 5, fig. 1; cycadophyte frond fragment; Wealden; England. See also Seward, 1919, p. 103.

SEWARDIELLA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 150.

SEZANNELLA Viguiér, 1908.

Sezannella major Viguiér, 1908, p. 13, pl. 5, figs. 1, 4, 7, 10; flower, Sterculiaceae; Eocene (Thanetien); Sézanne, France. [In Viguiér, 1907b, p. 1004, a generic description is given and two species listed, *S. major* and *S. minor*.]

SEZANNIA Saporta, 1865.

Sezannia credneriaeformis Saporta, 1865, p. 45; leaf, dicotyledon (some resemblance to *Credneria*); Tertiary; Sézanne, France.

SHERMANOPHYCUS J. H. Johnson, 1940.

Shermanophycus gouldi J. H. Johnson, 1940, p. 582, pl. 2, figs. 1, 2; alga, Cyanophyceae?; near top of Weber shale, Pennsylvanian; Park County, Colo.

SHIRAKIA Kawasaki, 1934.

Shirakia bilobifolia Kawasaki, 1934 (1927-34), p. 98, pl. 22, figs. 32, 33; fertile fernlike foliage, compared with *Eboracia lobifolia*; Kobosan series, beds I, H, G, Mesozoic; Samch'ök, South Korea.

SHIRAKIOPTERIS, Kon'no, 1950.

Shirakiopteris kawasaki Kon'no, 1950, p. 95, 5 figs.

SHOREOXYLON Berger, 1923.

Shoreoxylon palembangense (Kräusel) Berger, 1923, p. 145; wood, compared with *Shorea*; Tertiary; Sumatra. For *Cuesalpinioxylon palembangense* Kräusel, 1922, p. 247, pl. 2, fig. 1; pl. 3, figs. 1, 2; pl. 7, figs. 6, 11.

SHRUBSOLEA Reid and Chandler, 1933.

Shrubsolea jenkinsi Reid and Chandler, 1933, p. 262, pl. 10, figs. 11, 12; seed, Rutaceae; London Clay, Eocene; Herne Bay, Kent, England.

SIDERELLA Read, 1936.

Siderella scotti Read, 1936b, p. 226, figs. 12, 14-16; petrified stem, Siderellales, link between zygopterid ferns and Sphenophyllales?; Upper Devonian; Junction City, Boyle County, Ky.

SIGILLARIA Brongniart, 1822.

Sigillaria scutellata Brongniart, 1822, p. 222, pl. 12, fig. 4; stem impression showing leaf bases; Carboniferous; France.

SIGILLARIOIDES Lesquereux, 1870.

Sigillarioides radicans Lesquereux, 1870, p. 449, pl. 31, fig. 4; roots of *Sigillaria*; Upper Carboniferous; Mazon Creek, Ill.

SIGILLARIOPHYLLUM Grand'Eury, 1877.

A generic name proposed for leaves which Grand'Eury reports having seen attached to *Sigillaria*. He cites as an example: *Cypterites bicarinatus* Lindley and Hutton, 1833 (1831-37), p. 123, pl. 43, figs. 1, 2.

SIGILLARIOPSIS Renault, 1879.

Sigillariopsis decaisnei Renault, 1879, p. 270, pl. 12, figs. 15-19; pl. 13, figs. 1-4; petrified leaves and small stems of sigillarian affinities; Carboniferous; France.

SIGILLARIOSTROBUS (Schimper) Eugen Geinitz, 1873.

Sigillariostrobis bifidus Eugen Geinitz, 1873, p. 70, pl. 3, figs. 5-7; terminally forked sporophylls with sporangia at base; Permian (lower Dyas); near Pillnitz, Saxony. Generic name given by Schimper, 1870 (1869-74), p. 105, pl. 67, figs. 13-24.

SIGILLODENDRON C. E. Weiss, 1889.

Sigillodendron frondosum (Goeppert) C. E. Weiss, 1889, p. 164, pl. 2, fig. 1.

SIGNACULARIA Zalessky, 1929.

Signacularia noinskii Zalessky, 1929a, p. 192, pl. 17, figs. 1, 2; partly decorticated stem impression; Carboniferous; Donets, Russia.

SILESIOPTERIS Posthumus, 1924.

Silesiopteris sinuosa (Goeppert) Posthumus, 1924, p. 885. For *Gyropteris sinuosa* Goeppert, 1852b, p. 138, in part. See also Posthumus, 1931.

SILLIMANIA Unger, 1850.

Sillimania texana Unger, 1850a p. 524; wood, incertae sedis; Cretaceous; Texas.

SILPHIDIUM Massalongo, 1853.

Silphidium visianicum Massalongo, 1853a, p. 16. For illustration, see Massalongo, 1858e, p. 122, pl. 4, figs. 1-3; pl. 5, fig. 2.

SIMARUBITES E. W. Berry, 1930.

Simarubites eocenicus E. W. Berry, 1930, p. 94, pl. 44, figs. 15, 16; winged fruit, Simarubaceae; Wilcox group, Lower Eocene; La Grange, Fayette County, Tenn.

SIMARUBINIUM Platen, 1908.

Simarubinium crystallophorum Platen, 1908, p. 54; Pliocene; Calistoga, Calif.

SINOCTENIS Sze, 1931.

Sinoctenis grabaiana Sze, 1931, p. 14, pl. 2, fig. 1; pl. 4, fig. 2; cycadophyte foliage; Lower Jurassic (Lias); Pinghsiang, Kiangsi province, China.

SINUSIA Krestew, 1928.

Preuss. geol. Landesanst. Jahrb., 1928, Band 49, p. 574 (not seen, cited in Gothan, 1942b, p. 151).

SIPHODENDRON Saporta, 1884.

Siphodendron girardoti Saporta, 1884, p. 38, pl. 6, figs. 6, 7; Jurassic; Chatelneuf, France.

SIPIODICTYTES Reinsch, 1881.

Siphodictytes sp. Reinsch, 1881, p. 75, pl. 18a, figs. 1-4; pl. 18b, figs. 9-11; Permian (Dyas); Stockheim, Württemberg.

SIPHONEMA Bornemann, 1886.

Siphonema incrustans Bornemann, 1886, p. 18, pl. 2, figs. 1, 2; alga?; Cambrian; Sardinia.

SIPHONITES Saporta, 1872.

Siphonites heberti Saporta, 1872-73, p. 111, pl. 22, figs. 1, 2; alga?; Jurassic; Chalindrey, France.

SIPHONOTHALLUS Rothpletz, 1896.

Siphonothallus taeniatus Rothpletz, 1896, p. 896, pl. 22, fig. 10; alga; upper Oligocene; Wernleite, near Siegsdorf, Bavaria.

SIRODESMITES Pia, 1927.

Sirodesmites subgranulosus (Renault) Pia, in Hirmer, 1927, p. 123; fungus, Dematiaceae, Fungi Imperfecti; Oligocene. For *Sirodesmium subgranulosum* Renault, 1899, p. 980, pl. 17, fig. 18.

SITZIA Zalessky, 1930.

Sitzia kloeki Zalessky, 1930f, p. 929, fig. 9; fern frond fragment; Permian; Pechora basin, Russia.

SITZOPTERIS Zalessky, 1930.

Sitzopteris superba Zalessky, 1930f, p. 929, fig. 10; fern frond fragment; Permian; Pechora basin, Russia.

SJÖGRENIA Felix, 1894.

Sjögrenia crystallophora Felix, 1894a, p. 93, pl. 9, figs. 1, 2; wood, dicotyledon; Eocene; Apscheron, Transcaucasia.

SLOANEOPSIS Kuntze, 1904.

Sloaneopsis Kuntze, in Post and Kuntze, 1904, p. 522.

SMEYSTERIA Fraipont, 1921.

Smeysteria minuta Fraipont, 1921, p. M51; male cone, Coniferales; Wealden; Belgium. Pollen grains only figured; other illustrations and specimens destroyed during German invasion of Liège in August 1914.

SMILACIPITES Wodehouse, 1933.

Smilacipites molloides Wodehouse, 1933, p. 500, fig. 25; pollen, Liliaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

SMILACITES Brongniart, 1828.

Smilacites hastata Brongniart, 1828c, p. 45, pl. 3, fig. 8; Tertiary; Armissau, France.

SOLANITES Saporta, 1862.

Solanites brongniartii Saporta, 1862, p. 262, pl. 11, fig. 2; flower, Solanaceae; Tertiary; Aix, Provence, France.

SOLENIOPSIS Massalongo, 1851.

Soleniopsis linzoides Massalongo, 1851, p. 67; alga; Tertiary; Italy.

SOLENITES Lindley and Hutton, 1834.

Solenites murrayana Lindley and Hutton, 1834 (1831-37), p. 105, pl. 121; foliage, Ginkgoales; Jurassic; Gristhorpe Bay, near Scarborough, England. See also Seward, 1919, p. 64.

SOLENOPHYLLUM Maslov, 1935.

Solenophyllum paleozoicum Maslov, V. P. This reference not checked; it was reported by J. H. Johnson, 1943, as: Inst. Econ. Mineralogy Moskva Trans., 1935, v. 72, p. 1-28.

SOLENOPLASMIUM Reinsch, 1881.

Solenoplasium sp. Reinsch, 1881, p. 27, pl. 4, figs. 1-6; pl. 5, figs. 1-5; pl. 6, figs. 1-3; Upper Carboniferous; Zwickau, Saxony.

SOLENOPORA Dybowski, 1877.

Solenopora spongioides Dybowski, 1877, p. 124, pl. 2, figs. 11a, 11b; Ordovician; Herrküll, Russia.

SOLENOPORELLA Rothpletz, 1908.

Solenoporella jurassica (Brown) Rothpletz, 1908, p. 10, pl. 2, figs. 5, 6.

SOLENOSTELOPTERIS Kershaw, 1910.

Solenosteleopteris japonica Kershaw, 1910, p. 689, pl. 58; petrified fern rhizome; Upper Cretaceous; Hokkaido, Japan. See also Posthumus, 1931.

SOLENOSTROBUS Endlicher, 1847.

Solenostrobus subangulatus (Bowerbank) Endlicher, 1847, p. 272. For *Cupressinites subangulatus* Bowerbank, 1840, p. 60, pl. 10, figs. 24, 25; Eocene; Isle of Sheppey, England.

SOLENOULA Wood, 1861.

Solenoula psilophloeus Wood, 1861b, p. 238, pl. 4, fig. 3; stem impression, incertae sedis; Pennsylvanian; St. Clair, Schuylkill County, Pa.

SOMPHOSPONGIA Beede, 1899.

Somphospongia multiformis Beede, 1899, p. 128, pl. 38, figs. 1-10; described as a sponge but believed by later workers to be an alga (Cyanophyta); Burlingame limestone, upper Pennsylvanian; Kansas. See Johnson, J. H., 1946, p. 1104.

SOPHORITES Kuntze, 1904.

Sophorites Kuntze, in Post and Kuntze, 1904, p. 524.

SORITHAMNION Heydrich, 1900.

See Heydrich, 1900a, p. 82. A new genus erected to include species previously assigned to other genera, the first listed being *Nullipora ramosissima* Reuss, 1848, p. 29, pl. 3, figs. 10, 11.

SOROCLADUS Lesquereux, 1880.

Sorocladus stellatus Lesquereux, 1880, p. 328, pl. 48, text fig. 8; fertile fern frond fragment?; Carboniferous; Arkansas.

SOROSACCUS Harris, 1935.

Sorosaccus gracilis Harris, 1935, p. 145, pls. 24, 28; cone, *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

SOROTHECA Stur, 1883.

Sorotheca crepini Stur, 1883, p. 807; fig. 3a; Upper Carboniferous; Belgium.

SPARGANILITHES Woodward, 1879.

Sparganilithes gemmatus Woodward, 1879, p. 391, pl. 10, fig. 4; compared with infructescence of *Sparganium* (Sparganiaceae); Eocene; Sumatra.

SPARGANIOCARPUS Velenovsky and Viniklar, 1929.

Sparganiocarpus terminalis Velenovsky and Viniklar, 1929, p. 29, pl. 21, figs. 17-19; inflorescence, Sparganiaceae?; Cretaceous; Slivenec, Bohemia.

SPARGANIOIDITES Robert Potonie, 1950.

Sparganioidites sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friederich, 1950, p. 50, pl. C, fig. 11, no description given; pollen, Typhaceae; lower Miocene; Senftenberg, Bohemia.

SPARGANOFILIX Kuntze, 1904.

Sparganofilix Kuntze, in Post and Kuntze, 1904, p. 525.

SPARGANUM Unger, 1856.

Sparganum maximum Unger, 1856, p. 167, pl. 8, fig. 1; fibrous cortical strands; Upper Devonian; Saalfeld, Thuringia.

SPARTHOPHYCOS Massalongo, 1859.

Sparthophycos funalis Massalongo, in Massalongo and Scarabelli, 1859, p. 92 (footnote). For *Cylindrites funalis* Massalongo, 1856, pls. 1, 2; pl. 3, fig. 1; Eocene; Monte Spilecco, Italy.

SPATHITES Stanton and Knowlton, 1897.

Spathites sp. Stanton and Knowlton, 1897, p. 140; nom. nud.; Laramie formation; Upper Cretaceous.

SPATHULOPTERIS Kidston, 1923.

Spathulopteris obovata (Lindley and Hutton) Kidston, 1923a, p. 173, pl. 42, figs. 1-7; pl. 44, fig. 1; sphenopteridlike foliage; Calciferous Sandstone series, Lower Carboniferous; various localities in Midlothian, Dumfriesshire, Linlithgowshire, Scotland.

SPEGAZZINITES Felix, 1894.

Spegazzinites cruciformis Felix, 1894a, p. 279, pl. 19, fig. 8; spores, compared with *Spegazzinia ornata*; Pleistocene; Mecklenburg, Germany. See also Meschinelli, 1898, p. 82.

SPEIROCARPUS Stur, 1888.

Spirocarpus bartonei Stur, 1888b, p. 107. Genus cited earlier in Stur, 1885, p. 97; nom. nud.

SPENCERITES Scott, 1897.

Spencerites insignis (Williamson) Scott, 1897a, p. 167; petrified lycopodiaceous cone; Lower Coal Measures, Upper Carboniferous; near Halifax, England. For full description, see Scott, 1898a, p. 86, pls. 14, 15.

SPERMATITES Miner, 1935.

Spermatites elongatus Miner, 1935, p. 597, pl. 19, figs. 30-36, 38; Upper Cretaceous; Skansen, Disko Island, Greenland.

SPERMATOCODON Thomas, 1933.

Spermatocodon sewardi Thomas, 1933, p. 225, pl. 24, fig. 66; inflorescence of cupulate seeds; Molteno beds, Karroo system, Triassic; Upper Umkomas Valley, Natal.

SPERMATOSTROBUS Velenovsky and Viniklar, 1927.

Spermatostrobus suspectus Velenovsky and Viniklar, 1927, p. 30, pl. 11, figs. 7-9; cone, Coniferales; Cretaceous; Vyserovic, Bohemia.

SPERMITES Saporta, 1889.

Spermities semialatus Saporta, 1889, p. 142, pl. 20, figs. 27, 28; winged seed; Tertiary; Aix, Provence, France.

SPERMOLITHUS Thomas Johnson, 1917.

Spermolithus devonicus Thomas Johnson, 1917, p. 249, pl. 11, figs. 4-6; pl. 12, figs. 1, 2; isolated microsporangia and seeds, Pteridospermae?; Upper Devonian; Kiltorcan, County Kilkenny, Ireland.

SPHACIDIUM.

Error for *Phacidium*, in Ettingshausen, 1869, p. 74.

SPHAENOPHORA Massalongo, 1851.

Sphaenophora crassa Massalongo, 1851, p. 95, Tertiary; Italy. See also Massalongo, 1858b, p. 179, pl. 3, fig. 2; pl. 7, fig. 1.

SPHAEREDA Lindley and Hutton, 1837.

Sphaereda paradoxa Lindley and Hutton, 1837 (1831-37), p. 17, pl. 159; Jurassic; Gristhorpe, Yorkshire, England.

SPHAERIODES Reid and Chandler, 1933.

Sphaeriodes ventricosa (Bowerbank) Reid and Chandler, 1933, p. 331, pl. 15, figs. 18-23; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

- SPHAERIOPSIS** Geyler, 1887.
Sphaeropsis sp. Geyler, 1887, p. 488, pl. 32, fig. 3; fungus; Eocene; Labuan, Borneo.
- SPHAERITES** Unger, 1850.
Sphaerites punctiformis Unger, 1850a, p. 37; Miocene; Parschlug, Styria. Cited as nom. nud. in Unger, 1848, p. 53. See also Engelhardt, 1895, p. 9, pl. 1, fig. 1. Meschinelli, 1892, p. 751, erroneously attributes this genus to Hallier.
- SPHAEOCOCCIDES** Schimper, 1869.
Sphaeococcides cartilagineus (Unger) Schimper, 1869 (1869-74), p. 163, pl. 4, fig. 6.
- SPHAEROCOCCITES** Sternberg, 1833.
Sphaerococcites ciliatus Sternberg, 1833 (1820-38), p. 28, pl. 4, fig. 1; alga?; Jurassic; Solenhofen, Bavaria.
- SPHAEROCODIUM** Rothpletz, 1890.
Sphaerocodium bornemannii Rothpletz, 1890, p. 9; siphonaceous alga. See also Rothpletz, 1891, p. 299, pl. 15, figs. 2-9, 11-13; pl. 16, figs. 3, 5, 6.
- SPHAERONITES** Hisinger, 1828.
Sphaeronites pomum (Wahlenberg) Hisinger, 1828, p. 240, pl. 5, figs. 2-4.
- SPHAEROSPERMUM** Renault, 1907.
Sphaerospermum sp. Renault, in Bertrand, C. E., 1907, p. 223.
- SPHAEROSTOMA** Benson, 1909.
Sphaerostoma ovale (Williamson) Benson, 1909, p. 239; petrified seed, Pteridospermae; thought to be seed of *Heterangium grievii*; Calceiferous Sandstone series, Lower Carboniferous; Pettycur, Fifeshire, Scotland. For full treatment, see Benson, 1914, p. 2, pls. 1, 2.
- SPHAEROSTROBUS** Harris, 1935.
Sphaerostrobos clandestinus Harris, 1935, p. 143, pl. 29; isolated male cone, possibly belonging to *Podozamites*; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.
- SPHAERANEMA** John Smith, 1896.
Sphaeranema curta John Smith, 1896, p. 319, pl. 7, fig. 1; fungus mycelium?, in amber; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.
- SPHALLOPTERIS**.
 See *Sphalmopteris* Corda, in Posthumus, 1931.
- SPHALMOPTERIS** Corda, 1845.
Sphalmopteris mougeotii (Brongniart) Corda, 1845, p. 76. For *Anomopteris mougeotii* Brongniart, 1828a-38, p. 258, pl. 80. Brongniart originally based this species on fern foliage and a stem although there apparently was no evidence of organic connection; therefore Corda removed the stem to his new genus *Sphalmopteris*. [Eichwald, 1860, p. 92, believing that *Sphalmopteris* contained a typographical error, changed it to *Sphallopteris*.]
- SPHEGOPHYLLUM** Zalessky, 1939.
Sphegophyllum striatum Zalessky, 1939b, p. 372, fig. 54; leaf fragment, incertae sedis; Permian; Matveyevo, Kroutaia Katouchka, USSR.
- SPHEGOPTERIS** Zalessky, 1939.
Sphegopteris rugosa Zalessky, 1939b, p. 358, fig. 36; fernlike foliage; Permian; Matveyevo, USSR.
- SPHENASPIS** Hollick and Jeffrey, 1909.
Sphenaspis statenensis Hollick and Jeffrey, 1909, p. 51, pls. 10, 26; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.
- SPHENASTROPHYLLITES** Sterzel, 1907.
Sphenastrophyllites dicrsburgensis Sterzel, 1907, p. 694, pl. 56, figs. 1-3; Upper Carboniferous; Offenburg, Baden.
- SPHENOBALERA** Florin, 1936.
Sphenobalera spectabilis (Nathorst) Florin, 1936b, p. 38, pl. 5, figs. 1-4; ginkgophyte; Jurassic; Franz Joseph Land. See also Florin, 1936a, p. 108.
- SPHENOCALLIPTERIS** Zeiller, 1898.
Sphenocallipteris sp. Zeiller, 1898, p. 19.
- SPHENOCYCLOPTERIDIUM** Stockmans, 1948.
Sphenocyclopteridium belgicum Stockmans, 1948, p. 47, pl. 7, figs. 1-9a; Upper Devonian; Belgium.
- SPHENOGLOSSUM** Emmons, 1856.
Sphenoglossum quadrifolium Emmons, 1856, p. 335, pl. 1, fig. 2; Triassic; Haywood, Chatham County, N. C.
- SPHENOLEPIDIUM** Heer, 1881.
Sphenolepidium sternbergianum (Dunker) Heer, 1881, p. 19, pl. 13, figs. 1a, 2-3; pl. 14; twigs, foliage, Coniferales; Cretaceous; Valle de Lobos, Portugal.
- SPHENOLEPIS** Schenk, 1871.
Sphenolepis sternbergiana (Dunker) Schenk, 1871, p. 243, pl. 37, figs. 3, 4; pl. 38, figs. 3-13; foliage and cones, Coniferales; Wealden; Minden, Prussia, etc.
- SPHENOPHYCUS** Ruedemann, 1912.
Sphenophycus latifolius (Hall) Ruedemann, 1912, p. 74, pl. 1; pl. 2, figs. 1-14; alga?; Schenectady beds, Silurian; near Schenectady, N. Y.
- SPHENOPHYLLITES** Brongniart, 1822.
Sphenophyllites emarginatus Brongniart, 1822, p. 234, pl. 13, fig. 8; sphenophyllaceous foliage; Carboniferous.
- SPHENOPHYLLOSTACHYS** Seward, 1896.
Sphenophyllostachys dawsoni (Williamson) Seward, 1896b, p. 436; a generic name created by Seward for cones believed to have been borne by *Sphenophyllum*. For *Volkmania dawsoni* Williamson, 1871b, p. 29, pls. 1-3. See also Hoskins and Cross, 1943.

- SPHENOPHYLLOSTROBUS** Carpentier, 1919.
Sphenophyllostrobos sp. Carpentier, 1919b, p. 247, pl. 3, fig. 7; no description; Carboniferous; France.
- SPHENOPHYLLUM** Koenig, 1825.
Sphenophyllum emarginatum (Brongniart) Koenig, 1825, pl. 12, fig. 149. For *Sphenophyllites emarginatus* Brongniart, 1822 p. 234, pl. 13, fig. 8.
- SPHENOPTERIDIUM** Schimper, 1874.
Sphenopteridium dissectum (Goeppert) Schimper, 1874 (1869-74), p. 488, pl. 107, fig. 12; fernlike foliage, compared with *Triphylopteris* and *Aneimites*; Carboniferous; near Hausdorf, Silesia. For *Cyclopteris dissecta* Goeppert, 1852b, p. 161, pl. 14, figs. 3, 4.
- SPHENOPTERIS** (Brongniart) Sternberg, 1825.
Sphenopteris elegans (Brongniart) Sternberg, 1825 (1820-38), p. 15. For *Filicites elegans* Brongniart, 1822, pl. 2, fig. 2; fernlike foliage; Carboniferous; Silesia. [When raised to generic rank by Sternberg, the name was spelled *Sphaenopteris* although Brongniart's usage as a subgenus was *Sphenopteris*, and the latter has been followed by later writers.]
- SPHENOSTROBUS** Levittan and Barghoorn, 1948.
Sphenostrobos thompsonii Levittan and Barghoorn, 1948, p. 353, figs. 1-12; petrified strobilus of sphenopsid affinities; Des Moines group, Pennsylvanian; Shuler mine, Dallas County, Iowa.
- SPHENOTHALLUS** Hall, 1847.
Sphenothallus angustifolius Hall, 1847, p. 261, pl. 68, fig. 1; alga?; Silurian; between Canajoharie and Schoharie, N. Y.
- SPHENOTHECA** Kirchheimer, 1934.
Sphenotheca incurva Kirchheimer, 1934b, p. 789, fig. 19; fruit, Symplocaceae; Tertiary (Braunkohle); Elfriede, near Gohra, Germany. See also Kirchheimer, 1936, p. 71, pl. 10, figs. 27a-i.
- SPHENOZAMIA** (Pomel) Zwanziger, 1872.
Sphenozamia augustae Zwanziger, 1872, p. 337; Triassic (Keuper); Klagenfurt, Carinthia.
- SPHENOZAMITES** (Brongniart) Miquel, 1851.
Sphenozamites beani (Lindley and Hutton) Miquel, 1851b, p. 210. For *Cyclopteris beani* Lindley and Hutton, 1832 (1831-37), p. 127, pl. 44; cycadophyte leaf; Jurassic; Gristhorpe Bay, Yorkshire, England. Cited as subgenus of *Otozamites* in Brongniart, 1849, p. 61.
- SPHERITES** Dijkstra, 1949.
Spherites spinosus Dijkstra, 1949, p. 27, pl. 2, fig. 12; Hystriochsphaeridae; Senonian; South Limburg, Netherlands.
- SPHINXIA** Reid and Chandler, 1933.
Sphinxia ovalis Reid and Chandler, 1933, p. 397, pl. 20, figs. 12-23; fruit, Sterculiaceae; London Clay, Eocene; Sheppey, Kent, England.
- SPHYGMIMUM** Debey, 1881.
Sphygmium paradoxum Debey, in Murlon, 1881, p. 133; nom. nud.
- SPHYROPTERIS** Stur, 1883.
Sphyropteris crepini Stur, 1883, p. 656, fig. 6c; fertile fern pinnule; Upper Carboniferous; Belgium.
- SPILOSPHAERITES** Massalongo, 1857.
Spilosphaerites maculans Massalongo, in Massalongo and Scarabelli, 1857, p. 8. See also Massalongo and Scarabelli, 1859, pl. 1, figs. 2, 3, 13, 14; fungus; Miocene; Sinigaglia, Italy.
- SPIRALIA** Toulou, 1900.
Spiralia neudorfensis Toulou, 1900, p. 11; nom. nud.
- SPIRANGIUM** Schimper, 1870.
Spirangium carbonaria Schimper, 1870 (1869-74), p. 516. Not a plant; for recent discussion of this and related fossils, see Brown, R. W., 1950.
- SPIRAXIS** Newberry, 1885.
Spiraxis major Newberry, 1885, p. 33. Not a plant; for recent discussion of this and related fossils, see Brown, R. W., 1950.
- SPIREMATOSPERMUM** Chandler, 1925.
Spiromatospermum wetzleri (Heer) Chandler, 1925, p. 17, pl. 1, figs. 8a-c; fruit, Zingiberaceae; upper Eocene; Hordle, Hampshire, England.
- SPIROCHORDA** Schimper, 1879.
Spirochorda Schimper, in Schimper and Schenk, 1879 (1879-90), p. 51. No species designated but intended for *Dictyota spiralia* Ludwig; alga; Chordophyceae.
- SPIROPHYTON** Hall, 1863.
Spirophyton typum Hall, 1863, p. 80, pl. 2, figs. 1-3; Devonian; Otsego, N. Y.
- SPIROPTERIS** Schimper, 1869.
Spiropteris miltoni (Brongniart) Schimper, 1874 (1869-74), p. 19, pl. 49, fig. 4. See also Schimper, 1869, p. 688-690. Figure 4 is designated as type, because it conforms most closely with generally accepted usage.
- SPIRORAMMA** Massalongo, 1859.
Spiroamma spiralis Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Münsteria spiralis* Massalongo, 1857a, p. 778; nom. nud.
- SPIROXYLON** Hartig, 1848.
Spiroxylon ratzeburgii Hartig, 1848a, p. 172; wood; Tertiary; north Germany.
- SPIROXYLON** Walton, 1925.
Spiroxylon africanum Walton, 1925b, p. 18, pl. 2, fig. 12; pl. 3, figs. 15, 16; coniferous wood; horizon unknown; Harmsfontein, South Africa.

SPONDIAECARPON Langeron, 1899.

Spondiacarpon dubium Langeron, 1899, p. 454, pl. 3, figs. 2, 4; fruit, compared with *Spondias* (Anacardiaceae); Eocene; Sézanne, France. Menzel, 1913, p. 6, gives spelling as *Spondiacarpum*.

SPONDIAECARPUM.

See *Spondiacarpon*.

SPONDICARYA Reid and Chandler, 1933.

Spondicarya trilocularis Reid and Chandler, 1933, p. 306, pl. 13, figs. 35, 36; endocarp, Anacardiaceae; London Clay, Eocene; Minster, Kent, England.

SPONDIOCARPUS Warburg, 1897.

Spondiocarpus verbeekii Warburg, 1897, p. 229, pl. 4, figs. 6-15; Pliocene; Bangka Island, Malay [Indonesia].

SPONDYLPHYTON Schultes and Dorf, 1938.

Spondylphyton hyenioides Schultes and Dorf, 1938, p. 21, figs. 1, 2; sphenopsid; Lower Devonian; Beartooth Butte, Wyo.

SPONDYLOSTROBUS Müller, 1870.

Spondylostrobos smythii Müller, in Müller and Smyth, 1870, p. 610; cone fragment, Coniferales; Haddon, near Smythesdale, Victoria. See also Müller, 1871 (1871-82), p. 48, pl. 1.

SPONGELIOMORPHA Saporta, 1887.

Spongeliomorpha iberica Saporta, 1887, p. 299, pl. 6, figs. 2, 3; incertae sedis; Miocene; Alcoy, France.

SPONGILLOPSIS H. B. Geinitz, 1862.

Spongillopsis dyatica H. B. Geinitz, 1862, p. 132, pl. 24, figs. 2, 3; incertae sedis, probably not a plant; Permian; Saxony and Bohemia.

SPONGIOSTROMA Gurich, 1906.

Spongiostroma macandrinum Gurich, 1906, p. 41, pl. 7, fig. 1; alga?; placed in Rivulariaceae in Hirmer, 1927, p. 36; Carboniferous?; Namur, Belgium.

SPORANGIOSTROBUS Bode, 1928.

Sporangiostrobos orzeschensis Bode, 1928, p. 247, pl. 22, fig. 2; Upper Carboniferous; Upper Silesia.

SPORANGITES Dawson, 1863.

Sporangites papillata Dawson, 1863b, p. 454; generic name proposed "for spores or spore cases of *Lepidodendron*, *Calamites* and similar plants, not referred to the species to which they belong"; Carboniferous; Nova Scotia. See also Dawson, 1866, p. 165, pl. 12, fig. 80.

SPORITES Henry Potonie, emended by Schopf, 1938.

Sporites plicatus Schopf, 1938a, p. 51, pl. 7, figs. 7-9.

SPORLEDERIA Stiehler, 1860.

Sporlederia carbonaria (Schimper) Stiehler, 1860, p. 8, pl. 1. [For *Palaeoxyris*, not a plant, see Brown, R. W., 1950.]

SPOROCARPON Williamson, 1878.

Sporocarpon cellulosum Williamson, 1878, p. 347 (footnote); pl. 23, figs. 75, 75a, 75b; problematical reproductive organs. Several specimens are described and figured, and, judging from a later contribution (Williamson, 1880, p. 507), the figures cited above are intended to illustrate *S. cellulosum*. Another species, *S. ornatus* (Williamson, 1879, p. 511), is reported by Seward, 1917, p. 309 as being *Physostoma elegans*; Upper Carboniferous.

SPOROXYSTIS Lesquereux, 1880.

Sporocystis planus Lesquereux, 1880, p. 458, pl. 69, fig. 15; spores?; Carboniferous; Pittston, Pa.

SPOROGONITES Halle, 1916.

Sporogonites exuberans Halle, 1916b, p. 79; compared with sporogonium of moss; Devonian; Røragen, Norway. See also Halle, 1916, 1936.

SPOROLITHES Eichwald, 1853.

Sporolithes cordatus Eichwald, in Mercklin, 1853, p. 304; nom. nud.

SPORONITES Robert Potonie, 1931.

Sporonites neddeni Robert Potonie, 1931b, p. 332. See also Potonie, Robert, 1931, 1932; Potonie, Robert, and Gelletich, J., 1933.

SPOROPOLLENITES Thiergart, 1949?

Sporopollenites rostratus Thiergart, 1949, p. 7, pl. 1, fig. 7; spore; Triassic (Keuper).

SPOROTRICHITES Goeppert and Berendt, 1845.

Sporotrichites heterospermus Goeppert and Berendt, in Berendt, 1845, p. 116, pl. 6, figs. 42-46; fungus on insect, in amber; Miocene; Prussia. Meschinelli, 1892, p. 790, and 1898, p. 79, erroneously attributes this genus to Link.

SQUAMA Renault, 1885.

Squama taxinoides Renault, 1885, p. 82, pl. 5, figs. 11, 12; petrified microsporophylls, Coniferales?; Carboniferous; Grand Croix, near Rive-de-Gier, France. This seems to be the first use of this name in a generic sense; see discussion under *Squamae*.

SQUAMAE.

"*Squamae cycadearum*," Nathorst, 1876, pl. 12, figs. 14-17; apparently cycadophyte bracts; Rhaetic; Palyo, Sweden. This is evidently not intended as a generic name. The term *Squamae* (Latin, scales) has been used by other authors, for example, Feistmantel, 1881, p. 119, as a general term to describe gymnosperm scales.

SQUAMOPSIS Fucini, 1938.

Palaeontographia Italia, 1938, app. 2, p. 182 (not seen, cited in Gothan, 1942b, p. 152).

SQUAMULARIA Rothpletz, 1896?

Squamularia cicatricosa (Heer) Rothpletz, 1896, p. 893, pl. 22, fig. 5.

STACHANNULARIA C. E. Weiss, 1876.

Stachannularia tuberculata (Sternberg) C. E. Weiss, 1876, p. 17, pl. 1, figs. 2-4; pl. 2, figs. 1-3, 5; pl. 3, figs. 3-10, 12; articulate cone; pl. 2, fig. 1 shows attachment to calamitean? stem; Carboniferous.

STACHYCARPITES Ogura, 1932.

Stachycarpites projectus Ogura, 1932b, p. 458, pl. 23, figs. 8-10; petrified seed, Coniferales; Cretaceous; Hokkaido, Japan.

STACHYCARPUS Meunier, 1898.

Stachycarpus eocenica Meunier, 1898, 17, fig. p. 17; infructescence, Phytolacaceae?; Eocene; Beuvry, Bethune, France.

STACHYOPITYS Schenk, 1867.

Stachyopitys preslii Schenk, 1867, p. 185, pl. 44, figs. 9-12; microsporangiate cone?; Rhaetic; Strullendorf, near Bamberg, Bavaria.

STACHYOTAXUS Nathorst, 1886.

Stachyotaxus septentrionalis (Agardh) Nathorst, 1886c, p. 98, pl. 22, figs. 20-23, 33, 34; pl. 23, fig. 6; pl. 25, fig. 9; twigs, foliage, Coniferales; Rhaetic; Bjuf, Sweden.

STACHYPTERIS Pomel, 1849.

Stachypteris spicans Pomel, 1849, p. 336; fern; Jurassic; St. Mihiel, France. Apparently first illustrated species is *S. litophylla* Saporta, 1872 (1872-73), p. 387, pl. 50, figs. 1-5. See also Thomas, 1912.

STACHYURA Velenovsky and Viniklar, 1927?

Stachyura spicata Velenovsky and Viniklar, 1927, p. 41, pl. 9, fig. 2; pl. 12, figs. 3-6; pl. 14, fig. 8; Cretaceous; Slivenec, Bohemia.

STANGERITES.

See *Strangerites*.

STAPHIDIOPHORA Harris, 1935.

Staphidiophora secunda Harris, 1935, p. 114, pl. 8; seed-bearing fructification, ginkgophyte?; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

STAPHIDOIDES Perkins, 1906.

Staphidoides venosus (Lesquereux) Perkins, 1906, p. 223, pl. 58, fig. 1; fruit; Tertiary; Brandon, Vt.

STAPHYLOPTERIS Presl, 1838.

Staphylopteris polybotrya (Brongniart) Presl, 1838, in Sternberg, 1820-38, p. 174. For *Filicites polybotrya* Brongniart, 1828-38 p. 390, pl. 137, fig. 6; fernlike foliage; Tertiary; Armissan, near Narbon, France.

STATZIA, Weyland, 1938.

Statzia divaricata (Wessel and Weber) Weyland, 1938a, p. 101; pl. 12; figs. 1-13; inflorescence with male flowers, family uncertain; Tertiary; Rott, Siebengebirge, Germany.

STAUBIA Felix, 1884.

Staubia eriodendroides Felix, 1884, p. 29, pl. 2, figs. 2, 4-6, 8; wood, dicotyledon; Miocene; Medgyazo, Hungary.

STAUROPHYTON Meunier, 1891.

Staurophyton bagnoliensis Meunier, 1891, p. 134, fig. 1; incertae sedis.

STAUROPTERIS Binney, 1872.

Stauropteris oldhamia Binney, 1872b, p. 69; very briefly cited. Anatomy of frond described and illustrated by Williamson, 1874. More fully treated in Scott, 1905b, p. 114, figs. 1, 2; petrified coenopterid fern; Upper Carboniferous; England. See also Posthumus, 1931.

STEFFENSIA Goeppert, 1836.

Steffensia davallioides Goeppert, 1836, p. 269, pl. 11, figs. 3, 4; fertile fern foliage; Carboniferous; Waldenburg, Silesia.

STEGITES Meschinelli, 1892.

Stegites poacitum (Alexander Braun) Meschinelli, in Saccardo, 1892, p. 779. See also Meschinelli, 1898, p. 55, pl. 16, fig. 20; Discomycete; Tertiary; Oenigen, Switzerland.

STEINHAUERA Presl, 1838.

Steinhauera subglobosa Presl, in Sternberg, 1838 (1820-38), p. 202, pl. 49, fig. 4; pl. 57, figs. 1-4; cone, Coniferales?; Miocene; Alsattel, Bohemia.

STELEOPTERIS Goeppert, 1865.

Steleopteris angiopteroides Goeppert, 1865a, p. 267, pl. 61, figs. 7, 8; Permian. See also Posthumus, 1931.

STELOXYLON Solms-Laubach, 1897.

Steloxylon ludwigii (Goeppert and Leuckart) Solms-Laubach, 1897, p. 198. For *Medullosa ludwigii* Goeppert and Leuckart, in Goeppert and Stenzel, 1881, p. 126, pl. 17.

STEMMATOPTERIS Corda, 1867.

Stemmatopteris peltigera (Brongniart) Corda, 1867, p. 76. For *Sigillaria peltigera* Brongniart, 1828-38, pl. 138. See also Posthumus, 1931.

STENIXYS Harris, 1938.

Stenixys cosmarioides Harris, 1938, p. 15, pl. 5, fig. 4; desmid?; *Naiadita* Bed, upper Rhaetic; Bristol, England. Generic name cited in Kellaway, 1937, p. 226; nom. nud.

STENOCARPITES Brongniart, 1861.

Stenocarpites anisolobus Brongniart, 1861, p. 1237; leaf, Proteaceae; Tertiary; near Koumi, Greece.

- STENOGRAMMITES** Kretschetovitch, 1936.
Stenogrammites pseudocostata Kretschetovitch, 1936, p. 261, figs. 1-6; red alga; Jurassic; Gor'kia district, Russia.
- STENOMISCHUS** Harris, 1935.
Stenomischus athrous Harris, 1935, p. 144, pl. 24; male cone possibly related to *Cunninghamia*; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.
- STENOMYELON** Kidston, 1909.
Stenomyelon tuedianum Kidston, in Scott, 1909, p. 498; stem, Pteridospermae; Calceiferous Sandstone Series, Lower Carboniferous; Norham Bridge, Berwickshire, Scotland. For detailed account, see Kidston and Gwynne-Vaughan, 1912.
- STENONIA** Endlicher, 1847.
Stenonia ungeri Endlicher, 1847, p. 290. See also Geoppert, 1850, p. 228, pl. 37, figs. 1-3.
- STENOPHRAGMIUM** Reinsch, 1881.
Stenophragmium sp. Reinsch, 1881, p. 104, pl. 46, figs. 1-8; Upper Carboniferous; Newcastle, England.
- STENOPHYCUS** Fenton, 1943.
Stenophycus teichertii Fenton, 1943, p. 112, fig. 1; alga; Upper Goniatic Beds; Devonian; 2 miles west of Mt. Pierre, Kimberley Division, western Australia.
- STENOPHYLLUM** Zalesky, 1937.
Stenophyllum uninervium Zalesky, 1937c, p. 139, fig. 23; leaf fragment, incertae sedis; Permian; Russia.
- STENOPORIDIUM** Yabe and Toyama, 1928.
Stenoporidium chaetetiiformis Yabe and Toyama, 1928, p. 150, pl. 22, figs. 2-4; alga?; Hiraiga sandstone, Lower Cretaceous; Rikuchū province, Japan.
- STENOPTERIS** Saporta, 1872.
Stenopteris desmomeri Saporta, 1872-73, p. 292, pl. 32, figs. 1, 2; pl. 33, fig. 1; foliage, Pteridospermae?; Jurassic (Kimmeridgian); Morestel, near Lyon, France.
- STENORHACHIS** Saporta, 1879.
Stenorhachis ponsletii (Nathorst) Saporta, 1879, p. 193, fig. 22; cone of *Podozamites*?; Lower Jurassic. Various specimens employed by later writers as *Stenorachis*, *Stenorrachis*.
- STENZELIA** Goepfert, 1864.
Stenzelia elegans (Cotta) Goepfert, 1864, p. 218, pls. 38, 39; medullosan petiole; Permian; Chemnitz, Germany. See also Seward, 1917, p. 106.
- STEPHANIDA** Unger, 1856.
Stephanida gracilis Unger, 1856, p. 170, pl. 8, fig. 11; Devonian; Saalfeld, Thuringia. Earlier citation: Unger, 1854b, p. 599; nom. nud. See also Posthumus, 1931.
- STEPHANOFILIX** Kuntze, 1904.
Stephanofilix Kuntze, in Post and Kuntze, 1904, p. 536.
- STEPHANOPHYLLUM** Florin, 1936.
Stephanophyllum solmsi (Seward) Florin, 1936b, p. 82, pl. 11, figs. 7-10; pls. 12-16; structurally preserved ginkgophyte foliage; Jurassic; Franz Joseph Land.
- STEPHANOSPERMUM** Brongniart, 1874.
Stephanospermum achenioides Brongniart, 1874, p. 260, pl. 23, figs. 13-15; petrified seed; Carboniferous; St.-Étienne, France.
- STEPHANOSTEMON** Caspary, 1881.
Stephanostemon brachyandra Caspary, 1881, p. 29; flower, Saxifragaceae; Miocene; Samland, Baltic Prussia. First illustrated species: *A. helmi* Conwentz, 1886, p. 89, pl. 9, figs. 4-7.
- STEPHANOXYLON** Felix, 1882.
Stephanoxylon dubium Felix, 1882a, p. 43; wood, dicotyledon.
- STERCULIOCARPUS** E. W. Berry, 1916.
Sterculiocarpus cocenicus E. W. Berry, 1916b, p. 288, pl. 74, figs. 1-3; large capsular fruit, Sterculiaceae; Wilcox group, Eocene; Frierson Mill, De Soto Parish, La.
- STERCULIPHYLLUM** Nathorst, 1886.
Sterculiphyllum limbatum (Velenovsky) Nathorst, 1886a, p. 52. For *Sterculia limbata* Velenovsky, 1883, p. 21, pl. 5, figs. 2-5; pl. 6, figs. 1.
- STERCULITES** Dawson, 1888.
Sterculites vetustula Dawson, 1888, p. 193, leaf, Malvaceae?; Kootenai formation, Lower Cretaceous; Rocky Mts. For *Sterculia vetustula* Dawson, 1885, p. 10, pl. 3, fig. 2.
- STEREOPTERIS** Scott and Jeffrey, 1914.
Stereopteris annularis Scott and Jeffrey, 1914, p. 341, pl. 32, fig. 42; pl. 33, figs. 45-48 petiole, Zygopterideae; Mississippian; Kentucky.
- STERNBERGIA** Artis, 1825.
Sternbergia transversa Artis, 1825, p. 8, pl. 8; stem cast; Upper Carboniferous; England.
- STERZELIA** Gothan, 1928.
Sterzelia nindeli Gothan, 1928a, p. 4, pl. 3; compared with *Bothrodendron*; Carboniferous; Flöha, Saxony.
- STICHOPORELLA** Pia, 1927.
Stichoporella cylindrica (Lignier) Pia, in Hirmer, 1927, p. 69; alga, Dasycladaceae; Middle Jurassic (Dogger); France. For *Goniolima cylindrica* Lignier, 1913, p. 70, fig. 1.
- STICHOPTERIS** H. B. Geinitz, 1858.
Stichopteris ottonis (Guthrie) H. B. Geinitz, 1858, p. 14. For *Pecopteris ottonis* Guthrie, in Geinitz H. B., and Guthrie, 1849 (1848-49), p. 15, pl. 9, fig. 1.

STICHOSTROMIUM Reinsch, 1881.

Stichostromium sp. Reinsch, 1881, p. 56, pl. 12a, figs. 5-8; Upper Carboniferous; Zwickau, Saxony.

STICHUS Etheridge, 1904.

Stichus mermisoides Etheridge, 1904, p. 255, pls. 30, 31; fungus?; Cretaceous; Australia.

STICTODICTYTES Reinsch, 1881.

Stictodictytes sp. Reinsch, 1881, p. 74, pl. 18, figs. 1-5; pl. 18b, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

STICTOPLASMIUM Reinsch, 1881.

Stictoplasmium sp. Reinsch, 1881, p. 43, pl. 9, figs. 1-7; Upper Carboniferous; Zwickau, Saxony.

STIGMARIA Brongniart, 1822.

Stigmara ficoides (Sternberg) Brongniart, 1822, p. 228, pl. 12, fig. 7; lycopod "rootstock" cast; Carboniferous.

STIGMARIOCARPUM Acheppohl, 1883.

Stigmariocarpum sp. Acheppohl, 1883, p. 50, pl. 13; incertae sedis; Upper Carboniferous; Westphalia.

STIGMARIOIDES Lesquereux, 1870.

Stigmarioides truncatus Lesquereux, 1870, p. 453, pl. 29, fig. 4; said to differ from *Stigmara* in lack of regularity of appendage arrangement; Pennsylvanian; Mazon Creek, Ill.

STIGMARIOPSIS Grand'Eury, 1877.

Stigmariopsis inaequalis Grand'Eury, 1877, p. 173; compared with *Stigmara*; Carboniferous; France. First species illustrated: *Stigmariopsis eveni* (Lesquereux) Grand'Eury, 1890, p. 243, pl. 13, figs. 7, 13.

STIGMARITES Fliche, 1903.

Stigmarites nicklesi Fliche, 1903a, p. 908; rhizome?; Triassic; Meurthe-et-Moselle; France. See also Fliche, 1905a, p. 138, pl. 13, fig. 2.

STIGMATIOPHYLLUM Guembel, 1859.

Stigmatiophyllum lepidophylloides Guembel, 1859a, p. 106, pl. 8, fig. 13; Permian; Erbdorf, Bavaria.

STIGMATOCANNA Goeppert, 1852.

Stigmatocanna volkmanniana Goeppert, 1852a, p. 126, pls. 8, 9; stem casts; Landeshut, Silesia.

STIGMATODENDRON Eichwald, 1860.

Stigmatodendron ledebourii Eichwald, 1860, p. 208, pl. 18, fig. 5; pl. 19, figs. 7, 8; Carboniferous; Artinsk, Russia. First citation: Mercklin, 1856, p. 81; nom. nud.

STIGMOPHYTON Kräusel and Weyland, 1933.

Stigmophyton sturi Kräusel and Weyland, 1933, p. 40, pl. 3, fig. 6; vascular plant, incertae sedis; Middle Devonian; Bohemia. First citation: Kräusel and Weyland, 1932, p. 189 (nom. nud.).

STILBITES Pia, 1927.

Stilbites succini (Caspary) Pia, in Hirmer, 1927, p. 124, fig. 117; fungus, Stilbaceae; Eocene; Samland, Baltic Prussia. For *Stilbum succini* Caspary, 1887, p. 7.

STIPITOPTERIS Grand'Eury, 1877.

Stipitopteris aequalis Grand'Eury, 1877, p. 81, pl. 13, fig. 2; rachis of an arborescent fern; Carboniferous; France. See also Posthumus, 1931.

STIPTOSTROMIUM Reinsch, 1881.

Stiptostromium sp. Reinsch, 1881, p. 57, pl. 14b, figs. 1-5; Upper Carboniferous; Mittelbexbach, Bavaria.

STIZOCARYA Reid and Chandler, 1933.

Stizocarya communis Reid and Chandler, 1933, p. 336, pl. 15, figs. 35-42; endocarp. Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

STOLIDERMIUM Reinsch, 1884.

Stolidermium sp. Reinsch, 1884, p. 34, pls. 84-85D; Upper Carboniferous; Metschowk, Russia.

STOLIPLASMIUM Reinsch, 1881.

Stoliplasium sp. Reinsch, 1881, p. 42, pl. 10b, figs. 2-6; pl. 10c, fig. 1; pl. 29a, fig. 5; Upper Carboniferous; Zwickau, Saxony.

STOLISPHAERITES Reinsch, 1881.

Stolisphaerites sp. Reinsch, 1881, p. 30, pl. 7c, figs. 13-17; Upper Carboniferous; England.

STOLITES Reinsch, 1881.

Stolites sp. Reinsch, 1881, p. 119, pl. 52a, figs. 4-7; Upper Carboniferous; Zwickau, Saxony.

STOLLEYA Schubert, 1907.

Stolleya sp. Schubert, 1907, p. 212.

STOLLEYELLA Schubert, 1908.

Stolleyella velebitans Schubert, 1908, p. 383, pl. 16, figs. 8, 10, 12; Upper Carboniferous; Dalmatia, Yugoslavia.

STORGAARDIA Harris, 1935.

Storgaardia spectabilis Harris, 1935, p. 58, pls. 11, 12, 16; coniferous foliage; Rhaetic; Scoresby Sound, east Greenland.

STORMBERGIA Seward, 1911.

Stormbergia gardneri Seward, 1911a, p. 299, pl. 14; *Cladophlebis* type foliage; Stormberg series; Cyphergat, Cape Colony.

STRAELENIPTERIS Stockmans, 1936.

Straelenipteris eocenica Stockmans, 1936, p. 15, pl. 1; petrified fern rhizome; Eocene; Brussels.

STRANGERITES Bornemann, 1856.

Strangerites vittatus (Brongniart) Bornemann, 1856, p. 60. For *Taeniopteris vittata* Brongniart, 1828-38, p. 263, pl. 82, figs. 1-4.

STRATIOTITES Heer, 1855.

Stratiotites najadum Heer, 1855, p. 106, pl. 46, figs. 9-11; flower, Hydrocharideae; Tertiary; Oeningen, Switzerland.

STREPHOPTERIS Presl, 1838.

Strophopteris ambigua Presl, in Sternberg, 1838 (1820-38), p. 120, pl. 50, figs. 2a, 2b; fernlike foliage; Carboniferous; near Plass, Bohemia.

STREPTOTRICHITES Meschinelli, 1892.

Streptotrichites spiralis (Berkeley) Meschinelli, in Saccardo, 1892, p. 790. See also Meschinelli, 1898, p. 81, pl. 21, fig. 11; pl. 22, fig. 7.

STRIAESTROBUS Velenovsky and Viniklar, 1926.

Striaestrobis bohemicus Velenovsky and Viniklar, 1926, p. 43, pl. 1, fig. 4; seed-bearing cone, compared with *Picea*; Cretaceous; Berovice, Bohemia.

STRICKLANDIA Buckman, 1845.

Stricklandia acuminata Buckman, in Murchison, 1845, p. 94, pl. 2, fig. 2; leaf; Stonesfield slate; Sevenhampton Common, England.

STROBILANTHUS Velenovsky and Viniklar, 1929.

Strobilanthus cretaceous Velenovsky and Viniklar, 1929, p. 13, pl. 21, figs. 14-16; inflorescence, related to *Myrica*; Cretaceous; Slivenec, Bohemia.

STROBILITES Lindley and Hutton, 1833.

Strobilites elongata Lindley and Hutton, 1833 (1831-37), p. 23, pl. 89; cone, Coniferales?; Lower Jurassic (Blue Lias); Lyme, Dorsetshire, England.

STROBILOSTROBUS Bayer, 1914.

Archiv Pflrod. Výzkum Cech, svazek 15, p. 29 (not seen, cited in Gothan, 1942b, p. 153).

STROBILUS Hildreth, 1837.

Strobilus caryophyllus Hildreth, 1837, p. 32, fig. 8; incertae sedis; New York.

STROMATOCERIUM Seely, 1904.

Stromatocerium rugosum Seely, 1904, p. 144, pl. 70; coral or alga?; Black River limestone, Ordovician; Isle La Motte, Vt.

STRZELECKIA Johnston, 1896.

Strzeleckia gangamopteroides Johnston, 1896, p. 58, figs. 5-7; leaves, compared with *Gangamopteris* but lacks anastomosed veins; upper Mesozoic; Mt. Nicholas, Tasmania.

STURIA Němejce, 1934.

Sturia amoena (Stur) Němejce, 1934, p. 2, figs. 1-6 [unnumbered plate]; sphenopterid foliage bearing sporangia; Carboniferous; central Bohemia.

STURIELLA C. E. Weiss, 1885.

Sturiella intermedia (Renault) C. E. Weiss, 1885a, p. 492. For *Pecopteris intermedia* Renault, 1883, p. 122, pl. 22, figs. 8-11.

STURIELLA Kräusel, 1948.

Sturiella langeri Kräusel, 1948, p. 141, figs. 1-7; inflorescence, Bennettiales; Triassic; Lunz, Austria.

STYCHITES Reinsch, 1881.

Stychites sp. Reinsch, 1881, p. 66, pl. 15c, figs. 1-6; Upper Triassic (Keuper); Mittelbronn, Württemberg.

STYLOCALAMITES C. E. Weiss, 1884.

Stylocalamites arborescens (Sternberg) C. E. Weiss, 1884a, p. 206, pl. 2, fig. 2; pl. 3, fig. 1; pl. 8, fig. 3; Upper Carboniferous; Swina, Bohemia. For *Volkmannia arborescens* Sternberg, 1833 (1820-38), p. 52.

STYLOCODIUM Derville, 1931.

Stylocodium rhopaloides Derville, 1931, p. 106, pl. 14, figs. 48-51; pl. 15, figs. 52-56; alga, Codiaceae; Carboniferous; Bas-Boulonnais, France.

STYLOPHYCUS J. H. Johnson, 1940.

Stylophycus carbonarius J. H. Johnson, 1940, p. 587, pl. 4, fig. 2; calcareous alga, probably Cyanophyceae; Weber formation, Pennsylvanian; Park County, Colo.

SUBLEPIDODENDRON Hirmer, 1927?

Sublepidodendron mirabile (Nathorst) Hirmer, 1927, p. 204.

SUBLEPIDOPHLOIOS Sterzel, 1907.

Sublepidophloios hagenbachensis Sterzel, 1907, p. 728, pl. 61, figs. 1-3; pl. 62, figs. 1-4; arborescent lycopod stem impression; Upper Carboniferous; Hagenbach, Baden.

SUBTETRAPEDIA Renault, 1899.

Subtetrapedia russiana Renault, 1899, p. 1036; alga?; Carboniferous; Alexandrowski, Kourakino, Russia.

SUEVIOXYLON Kräusel, 1928.

Suevioxylon zonatum Kräusel, 1928, p. 253, figs. 5-8; wood, dicotyledon; Jurassic; Heubach, Germany.

SULCOCARPOLITHES Kuntze, 1904.

Sulcocarpolithes Kuntze, in Post and Kuntze, 1904, p. 543.

SULCODIPTERIS Kuntze, 1904.

Sulcodipteris Kuntze, in Post and Kuntze, 1904, p. 543.

SUMATROXYLON Berger, 1923.

Sumatroxylon mollii (Kräusel) Berger, 1923, p. 145; wood, Burseraceae; Tertiary; Sumatra. For *Anacardioxylon mollii* Kräusel, 1922, p. 252, pl. 2, fig. 5; pl. 5, figs. 4, 5; pl. 5, figs. 2-4.

SUPAIA David White, 1929.

Supaia thinnfeldtioides David White, 1929, p. 62, pl. 14; pl. 15, figs. 1-3; pl. 16, figs. 2, 3; frond, compared with *Danaeopsis* and *Protoblechnum*; lower part of Hermit shale, Permian; Hermit basin, 7.5 miles west of Grand Canyon station, Arizona.

SUTCLIFFIA Scott, 1906.

Sutcliffia insignis Scott, 1906b, p. 62, pls. 7-10; petrified stem, Medulloseae; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

SUVUNDUKIA Zalessky, 1948.

Suvundukia aciculata Zalessky, 1948, p. 42, 7 figs.

SVALBARDIA Hoeg, 1942.

Svalbardia polymorpha Hoeg, 1942, p. 70, pls. 20-31; psilophyte; Devonian; Spitzbergen.

SWEDENBORGIA Nathorst, 1876.

Swedenborgia cryptomerides Nathorst, 1876, p. 66, pl. 16, figs. 6-12; cones, Coniferales?; Lower Jurassic (Hörs-sandstein, Lias); Palsjo, Sweden.

SWIETENIOXYLON Hermann Hoffmann, 1883.

Swietenioxylon sternbergense Hermann Hoffmann, 1883, p. 105; Tertiary; Mecklenburg, Germany.

SYCIDIDIUM Sandberger, 1849.

Sycidium reticulatum Sandberger, 1849, p. 672, pl. 8b, figs. 1a-d; Devonian; Eifel, Rhenish Prussia.

SYCOPHYLLUM Schulze, 1887.

Sycophyllum dentatum Schulze, 1887, p. 464; Upper Cretaceous (Senonian); Heimberg, Switzerland.

SYLVELLA Zalessky, 1937.

Sylvella alata Zalessky, 1937b, p. 86, figs. 53-55; winged seed; Permian; Matveyevo, USSR.

SYLVIA Zalessky, 1937.

Sylvia striata Zalessky, 1937b, p. 66, fig. 28; fernlike foliage; Permian; Matveyevo, USSR.

SYLVOPTERIS Zalessky, 1937.

Sylvopteris conspicua Zalessky, 1937b, p. 52, fig. 17, fernlike foliage; Permian; bank of river Sylva near river Tche-karda, Russia.

SYMPHONIOXYLON Chiarugi, 1933.

Symphonioxylon stefaninii Chiarugi, 1933, p. 118, pl. 15, figs. 1, 2; Cretaceous; Seccgure, southern Italian East Africa (Soma'iland).

SYMPHOROCARPOPHYLLUM Dawson, 1886.

Symphorocarpophyllum albertum Dawson, 1886, p. 30, pl. 2, fig. 17; leaf, dicotyledon; upper Laramie, Upper Cretaceous; Great Valley, Canada.

SYMPHYOPLASMIUM Reinsch, 1881.

Symphyoplasmium sp. Reinsch, 1881, p. 44, pl. 7, figs. 1, 2; pl. 31a, figs. 1-7; Algonkian, pre-Cambrian; Thiersheim, Bavaria, etc.

SYMPLOCOIDES Chandler, 1926.

Symplocoides glandulosa Chandler, 1926, p. 41, pl. 7, fig. 5; endocarp, Symplocaceae?; upper Eocene; Hordle, Hampshire, England.

SYNCARPITES.

Mistake for *Syncarpites*, in Pimenova, 1929, p. 187.

SYNCARDIA Unger, 1856.

Syncardia pusilla Unger, 1856, p. 171, pl. 8, fig. 16; petiole of *Cladoxylon*?; Upper Devonian; Saalfeld, Thuringia. See also Posthumus, 1931.

SYNCARPITES Schmalhausen, 1883.

Syncarpites ovalis Schmalhausen, 1883, p. 321, pl. 38, figs. 16-20; fruit, compared with *Syncarpia*; Oligocene; Magelno in Wolhynien, Russia.

SYNIA Zalessky, 1934.

Synia pcrelegans Zalessky, 1934b, p. 252, fig. 21; fernlike foliage; Permian; Pechora basin, Russia.

SYNIOPTERIS Zalessky, 1929.

Syniopteris nesterenkoi Zalessky, 1929a, p. 729, figs. 1-3; foliage, compared with *Callipteris*; Upper Permian; Pechora basin, Russia.

SYRINGODENDRON Sternberg, 1820.

Syringodendron organum Sternberg, 1820 (1820-38), p. 24, pl. 13, fig. 1; decorticated sigillarian stem.

SYRINGOMORPHA Nathorst, 1886.

Syringomorpha nilssoni (Torell) Nathorst, 1886b, p. 47, fig. 22.

SYRINGOXYLON Dawson, 1862.

Syringoxylon mirabile Dawson, 1862, p. 305, pl. 12, figs. 1-5; wood, incertae sedis; Hamilton group, Devonian; Eighteen-mile Creek, Lake Erie.

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TABERNAEMONTANOPHYLLUM Geyler, 1887.

Tabernaemontanophyllum sp. Geyler, 1887a, p. 496, pl. 33, fig. 8; leaf fragment, Apocynaceae; Eocene; Labuan, Borneo.

TAENIDIUM Heer, 1877.

Taenidium serpentinum Heer, 1877a, p. 117, pl. 45, figs. 9, 10; plant?; Lower Jurassic (Lias); Ganel, Switzerland.

TAENIOCRADA David White, 1902.

Taeniocrada lesquereuxi David White, 1902, p. 603. For *Haliserites dechianus* Goepfert as described and illustrated by Penhallow, 1893b, p. 109, pl. 10, fig. 6; Catskill beds, Devonian; Factoryville, Pa.

TAENIOPHYCUS Schimper, 1869.

Taeniophycus liasicus Schimper, 1869 (1869-74), p. 190; alga; Lower Jurassic (Lias); Württemberg. For *Himantolites taeniatus* (Kurr) Fischer-Ooster, 1858, p. 54, pl. 3, fig. 4; pl. 12, fig. 5.

TAENIOPHYLLUM Pomel, 1849.

Taeniophyllum münsteri Pomel, 1849, p. 345; cycadophyte leaf; Jurassic; D'Hettange, France. For *Nilssonia contigua* Münster, in Goeppert, 1844, p. 142.

TAENIOPHYLLUM Lesquereux, 1878.

Taeniophyllum deflexum Lesquereux, 1878b, p. 331. See also Lesquereux, 1879, pl. 83, fig. 4; cordaitan? stem with leaves; Pennsylvanian; Cannelton, Beaver County, Pa.

TAENIOPTERIS Brongniart, 1832.

Taeniopteris vittata Brongniart, 1832 (1828a-38), p. 263, pl. 82, figs. 1-4; cycadophyte foliage; Jurassic; Whitby, England. See also Thomas, 1915.

TAENIOXYLON Felix, 1882.

Taenioxylon varians Felix, 1882a, p. 64; wood; Leguminosae; Antigua, West Indies. See also Felix, 1883, p. 10, pl. 1, figs. 3, 4.

TAENIOXYLON Crie, 1889.

Taenioxylon indicum Crie, 1889b, p. 19; nom. nud. See note under *Bottgeria*.

TAENIOZAMITES Harris, 1932.

Taeniozamites vittata (Brongniart) Harris, 1932a, p. 101, fig. 39; foliage, probably of *Williamsoniella coronata*; see also p. 33.

TAENITITES Fritel, 1909.

Taenitites crassicosatus (Watelet) Fritel, 1909, p. 102, fig. 1; sterile fern frond; Paleocene; France.

TAIBIA Zalesky, 1934.

Taibia tyrghanensis Zalesky, 1934c, p. 772, fig. 38, incertae sedis; Permian; Prokopyevskoie, Kuznets, Russia.

TAITIA Crookall, 1930.

Taitia catena Crookall, 1930, p. 175, 1 pl.; plant?; Upper Silurian; Scotland.

TAKLIOSTROBUS Sahni, 1931.

Takliostrobus alatus Sahni, 1931, p. 86, pl. 14, figs. 67, 68; pl. 15, figs. 89-93; petrified cone, Abietineae; uppermost Cretaceous; 2½ miles northwest of Nagpur, India.

TALISIIPITES Wodehouse, 1933.

Talisiipites fischeri Wodehouse, 1933, p. 613, fig. 46; pollen, Sapindaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

TAMESICARPUM Reid and Chandler, 1933.

Tamesicarpum polyspermum Reid and Chandler, 1933, p. 421, pl. 22, figs. 8-21; fruit, Lythraceae?; London Clay, Eocene; Sheppey, Kent, England.

TAONURUS Fischer-Ooster, 1858.

Taonurus brianteus (Villa) Fischer-Ooster, 1858, p. 41, pl. 1a, fig. 1; alga?; Cretaceous.

TAPHIRHELMINTHOPSIS Sacco, 1888.

Taphirhelminthopsis auricularis Sacco, 1888, p. 172, pl. 2, fig. 3; plant?; Eocene; Italy.

TAPHROCANNA Eichwald, 1860.

Taphrocana biarmica Eichwald, 1860, p. 176, pl. 12, fig. 4; calamitean? stem cast; Permian; near Bjelebei, Orenbourg, Russia.

TARRIETIOXYLON Kräusel, 1922.

Tarrietioxylon sumatrense Kräusel, 1922, p. 259; pl. 4, figs. 2, 3, 6; pl. 6, figs. 4, 5, 9; wood, Sterculiaceae; Miocene; Sumatra.

TASMANITES Newton, 1875.

Tasmanites punctatus Newton, 1875, p. 341, pl. 10, figs. 1-9; spores; "Permian-Carboniferous"?; Tasmania.

TAXEOPSIS Renault, 1885.

Taxeopsis grand'euryi Renault, 1885, p. 208, pl. 8, fig. 9; coniferous shoots bearing foliage and staminate? cones; Permian; Lally, near Autun, France.

TAXITES Brongniart, 1828.

Taxites tournallii Brongniart, 1828c, p. 47, pl. 3, fig. 4; Oligocene; Armissan, France.

TAXODIELLA Zalesky, 1939.

Taxodiella recticaulis Zalesky, 1939b, p. 367, figs. 48, 49; foliage twigs, Coniferales; Permian; Matveyevo, Kroutaia Katouchka, USSR.

TAXODIODEIDITES Robert Potonie, 1950.

Taxodioidites hiatus Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. A, fig. 23; pollen, Taxodiaceae; Pliocene; Chatt-Aquitain, Germany.

TAXODIOXYLON Hartig, 1848.

Taxodioxyylon goepperti Hartig, 1848a, p. 169. See also Kräusel, 1949.

TAXODITES Presl, 1838.

Taxodites tenuifolius Presl, in Sternberg, 1838 (1820-38), p. 204, pl. 33, fig. 4; coniferous foliage twigs; Triassic (Keuper).

TAXOPITYS Kräusel, 1928.

Taxopitys africana Kräusel, in Kräusel and Range, 1928, p. 46, pl. 10, figs. 3, 4; pl. 11, figs. 1-5; wood, Coniferales; between Ecce and Stormberg series, Permian; Kaokofeld, German Southwest Africa.

TAXOXYLON Houlbert, 1910.

Taxoxylon falunense Houlbert, 1910, p. 72, pl. 3; petrified coniferous wood; Tertiary; Manthelan-Bossee-Paulmy, France.

TCHERNOVIA Zalessky, 1929.

Tchernovia synensis Zalessky, 1929a, p. 189, pl. 16, figs. 4, 5; incertae sedis; Carboniferous; Donets, Russia.

TCHIRKOVIELLA Zalessky, 1930.

Acad. sci. U. R. S. S. Bull., 1930, p. 924 (not seen, cited in Gothan, 1942b, p. 154).

TECTOCARYA Kirchheimer, 1934.

Tectocarya lusatica Kirchheimer, 1934a, p. 773, fig. 15, fruit, Cornaceae; Tertiary (Braunkohle); Germany. See also Kirchheimer, 1936a, p. 62, pl. 7, figs. 22a-n.

TEICHOSPERMA Renner, 1907.

Teichosperma spadiciflorum Renner, 1907, p. 219, figs. 1-6; Lower Oligocene; Egypt.

TEILHARDIA Seward, 1913.

Teilhardia valdensis Seward, 1913, p. 96, pl. 11, figs. 7a-9b; fern foliage; Fairlight Clay, Wealden; Ecclesbourne, near Hastings, England.

TELANGIUM Benson, 1904.

Telangium scotti Benson, 1904, p. 162, pl. 11, microsporangiate organ, Pteridospermae; Gannister beds, Upper Carboniferous; Dulesgate and Hough Hill, England.

TELEPHRAGMOXYLON Torrey, 1921.

Telephragmoxyylon brachyphylloides Torrey, 1921, p. 74, pl. 3; wood, Coniferales; Lower Cretaceous; Texas.

TELEUTOSPORA Renault, 1894.

Teleutospora milloti Renault, 1894, p. 171; Carboniferous (Culm); Combres near Rigny, France. See also Renault, 1896, p. 427, fig. 80.

TELEUTOSPORITES Meschinelli, 1898.

Teleutosporites milloti (Renault) Meschinelli, 1898, p. 13, pl. 5, fig. 13; fungus, in *Lepidodendron* megaspore; Carboniferous; Loire, France.

TEMPSKYA Corda, 1845.

Tempskya pulchra Corda, 1845, p. 81, pl. 58, figs. 1-5; fern trunk composed of numerous siphonostelic stems; Upper Cretaceous; Germany. See also Andrews and Kern, 1947; Read, 1939; Read and Brown, 1937; Posthumus, 1931.

TENUICUTITES C. E. Bertrand, 1898.

Tenuicutites chytridiaeformis C. E. Bertrand, 1898, p. 188, pl. 10, fig. 118; pl. 11, fig. 140; Chytrideaceae; Upper Carboniferous.

TERMINALIOPHYLLUM Geyler, 1887.

Terminaliophyllum sp. Geyler, 1887, p. 502, pl. 34, fig. 1; Eocene; Labuan, Borneo.

TERMINALIOXYLON Georg Schonfeld, 1947.

Terminalioxyylon naranjo Georg Schonfeld, 1947, p. 36, pl. 5, figs. 1-3; wood, Combretaceae; Tertiary; Colombia.

TERMINALIPHYLLUM Velenovsky, 1889.

Terminaliphyllum rectinerve Velenovsky, 1889, p. 54. For *Terminalia rectinervis* Velenovsky, 1884, p. 5, pl. 5, figs. 1, 2; Combretaceae; Upper Cretaceous; Kaulnic, Bohemia.

TERNITHRIX Reis, 1921.

Ternithrix compressa Reis, 1921, p. 313. See also Reis, 1923, p. 105, pl. 4, figs. 1, 2; Miocene; Bavaria.

TERNSTROEMIOXYLON Eric Schonfeld, 1930.

Ternstroemioxyylon kräuseli Eric Schonfeld, 1930, p. 119, figs. 10-18; wood, dicotyledon; Miocene; Vogelsberg, Germany.

TERNSTROEMIPHYLLUM Velenovsky, 1889.

Ternstroemiphyllum crassipes Velenovsky, 1889, p. 54. For *Ternstroemia crassipes* Velenovsky, 1884, p. 7, pl. 3, figs. 3, 4; Upper Cretaceous; Vyserovic, Bohemia.

TERNSTROEMITES E. W. Berry, 1916.

Ternstroemites coligniticus E. W. Berry, 1916b, p. 294, pl. 76, figs. 1, 2; pl. 78, fig. 5; leaf, Ternstroemiaceae; Lagrange formation, lower Eocene; Puryear, Henry County, Tenn.

TERNSTROMIACINIUM Felix, 1894.

Ternstromiacinium euryoides Felix, 1894a, p. 99, pl. 10, fig. 4; wood, Ternstromiaceae; Eocene; Apscheron, Transcaucasia. See also Schonfeld, Eric, 1930, p. 119.

TERQUEMELLA (Munier-Chalmas) Morellet and Morellet, 1913.

Terquemella parisiensis Munier-Chalmas, in Morellet and Morellet, 1913, p. 25, pl. 3, fig. 11; Eocene; Orme, France. Cited in Munier-Chalmas, 1877, p. 817; nom. nud.

TESCHIA Reid and Reid, 1915.

Teschia crassicarpa Reid and Reid, 1915, p. 108, pl. 10, figs. 22a, 22b; fruit, Anacardiaceae; Pliocene (Reuverian); Reuver, Swalmen, Netherlands.

TESSELLARIA Eichwald, 1860.

Tessellaria antiqua Eichwald, 1860, p. 221, pl. 17, fig. 5; cycadophyte? stem; Permian?; Bjelebei, Orenbourg, Russia. Cited as *Tessellaria* Schimper and Mougeot, in Mercklin, 1856, p. 81; nom. nud.

TETONOPHYCUS Fenton and Fenton, 1939.

Tetonophycus blackwelderii Fenton and Fenton, 1939, p. 99, pl. 4, figs. 1, 2; calcareous alga; Housetop Mtn., Grand Teton Park, Wyo.

TETRACENTRONITES Mathiesen, 1932.

Tetracentronites hartzi Mathiesen, 1932, p. 5, figs. 1-3; wood, compared with *Tetracentron*; early Tertiary; Cape Dalton, east Greenland.

TETRAGONIS Eichwald, 1842.

Tetragonis munchisoni Eichwald, 1842, p. 81, pl. 3, fig. 18; Upper Silurian; Russia.

TETRAMERIDIUM Gothan, 1913.

Tetrameridium caducum Gothan, 1913a, p. 132, pl. 27, figs. 1, 2; sphenopterid foliage; Upper Carboniferous; Upper Silesia.

TETRAPANTHEROIDEA Langeron, 1899.

Tetrapantheroidea polita Langeron, 1899, p. 445, pl. 4, fig. 3; leaf, compared with *Tetranthera*; Eocene; Sézanne, France.

TETRAPLOPORELLA Steinmann, 1903.

Tetraplopora remesi Steinmann, 1903, p. 45, fig. 11; alga, Dasycladaceae; Cretaceous; Stramberg, Moravia.

TETRAPYLON Frenguelli, 1950.

Tetrapylon heteromorphum Frenguelli, 1950, p. 15, figs. 1, 2; fern? frond; Upper Jurassic; between Villa Union and Guadacal, La Rioja, Argentina.

TETRASPHENOPHYLLUM Lotsy, 1909.

Tetrasphenophyllum majus (Kidston) Lotsy, 1909, p. 526, fig. 350.

TETRASPORITES Fliche, 1886.

Tetrasporites alsaticus Fliche, 1886, p. 350; Oligocene; near Mulhouse, Alsace-Lorraine.

TETRASTICHIA Gordon, 1938.

Tetrastichia dupatides Gordon, 1938, p. 362, pls. 1-6; pteridosperm stem; Calceiferous Sandstone series, Lower Carboniferous; Oxroad Bay, east of Tantallon Castle, East Lothian, Scotland.

TEUTLOPORELLA Pia, 1912.

Teutlopora herculea (Stoppani) Pia, 1912, p. 37, pl. 2, fig. 27; pl. 3, figs. 1, 2; alga, Siphonaceae Verticillatae; Triassic; Rohrbach, Austria.

THALASSOCHARIS Debey, 1853.

Thalassocharis bosqueti Debey, in Miquel, 1853, p. 51, pl. 6, fig. 1. Cited in Debey, 1848, p. 119; nom. nud.

THALICTROIDES Mantell, 1844.

Thalictroides parisensis Mantell, 1844, p. 190, fig. 1; seed?; illustration only; Tertiary; Paris.

THALLITES Walton, 1925.

Thallites erectus (Leckenby) Walton, 1925a, p. 564; for thalloid liverworts of doubtful familial affinities. For *Marchantites erectus* Leckenby, 1864, p. 74, pl. 1, figs. 2a, 2b.

THALLOMIA Heard and Jones, 1931.

Thallomia llandyfriensis Heard and Jones, 1931, p. 557, pls. 43-46; a liverwort-like plant but with spirally thickened

elements; Lower Devonian, Devonian; Carmarthenshire. A striking example of the liberality that is occasionally taken with paleobotanical taxonomy. The fossil was originally described as *Eohepatica dyfriensis* (British Assoc. Adv. Sci. Rept., 1930, p. 330-331 [1931]), a name which conveyed to some botanists that it was a liverwort rather than liverwortlike, and as "This name has not proved to be a very happy one," it was changed to *Thallomia*.

THAMNITES Reinsch, 1881.

Thamnites sp. Reinsch, 1881, p. 60, pl. 13a, fig. 4; Upper Carboniferous; Zwickau, Saxony.

THAMNOCLADUS David White, 1902.

Thamnocladus clarkei David White, 1902, p. 596, pl. 3, fig. 1; pl. 4, figs. 1, 2; alga; Chemung formation, Upper Devonian; East Windsor, N. Y.

THAMNOPTERIS Brongniart, 1849.

Thamnopteris schlehtendali (Eichwald) Brongniart, 1849, p. 85. For *Anomopteris schlehtendali* Eichwald, 1842, p. 180, pl. 4, figs. 3-5; petrified stem, Osmundaceae; Permian; Kamskovo-thin, Russia. See also Kidston and Gwynne-Vaughan, 1909; Posthumus, 1931.

THAUMASIODENDRON Bureau, 1905.

Thaumasiodendron andegavense Bureau, 1905, p. 157, figs. p. 150, 152, 154, 156.

THAUMATOPORELLA Pia, 1927.

Thaumatopora parvoesciculifera (Raineri) Pia, in Hirmer, 1927, p. 69, alga, Dasycladaceae; Upper Cretaceous; Libia. For *Gyroporella parvoesciculifera* Raineri, 1922, p. 83, pl. 3, figs. 17, 18.

THAUMATOPTERIS Goeppert, 1841.

Thaumatopteris münsteri Goeppert, 1841a, p. 33, pls. 1-3; fertile frond, Dipteridaceae; Rhaetic; Bayreuth, Bavaria.

THECOPHYLLUM Massalongo, 1858.

Thecophyllum flabellatum Massalongo, 1858b, p. 815; nom. nud.

THECOPTERIS Miner, 1935.

Thecopteris major Miner, 1935, p. 591, pl. 18, figs. 11-15; fern sporangia?; Upper Cretaceous; Skansen, east coast Disco Island, Greenland.

THEOBALDIA Heer, 1877.

Theobaldia raetica Heer, 1877a, p. 114, pl. 44, figs. 1-3, 15b; alga?; Lower Jurassic (Lias); Ganei, Switzerland.

THESIANTHIUM Conwentz, 1886.

Thesanthium inclusum Conwentz, 1886, p. 132, pl. 13, figs. 1-5; flower, in amber, Santalaceae; early Tertiary; West Prussia.

THINNFELDIA Ettingshausen, 1852.

Thinnfeldia rhomboidalis Ettingshausen, 1852a, p. 2, pl. 1, figs. 4-7; pteridosperm? foliage; Lower Jurassic (Lias); Steierdorf, Hungary.

THOMASIODENDRON.

Error for *Thaumasiodendron*, in Bureau and Bureau, 1908, p. 653.

THOREITES Massalongo, 1850.

Thoreites brongniartii Massalongo, 1850, p. 21; alga; Eocene; Monte Bolca, Italy.

THOUINOPSIS MacGinitie, 1941.

Thouinopsis myricaefolia MacGinitie, 1941, p. 144, pl. 36, figs. 2, 4; pl. 37, figs. 6-9; pl. 45, fig. 9; leaves and winged fruits, Sapindaceae; Chalk Bluffs flora, middle Eocene; near You Bet, Nevada County, Calif.

THUIOXYLON.

See *Thuyoxylum*.

THUITES Sternberg, 1825.

Thuites alienus Sternberg, 1825 (1820-38), Tentamen, p. xxxviii, pl. 45, fig. 1; coniferous foliage twigs; Cretaceous; Smetschna, Bohemia.

THUJOXYLON.

See *Thuyoxylum*.

THUOXYLON.

See *Thuyoxylum*.

THURSOPHYTON Nathorst, 1915.

Thursophyton milleri Nathorst, 1915, p. 17, pl. 5, figs. 3-9; pl. 6, figs. 1-5; pl. 7, fig. 1; lycopod stem impression; Middle Devonian; Roeragen, Norway.

THUYOXYLON.

See *Thuyoxylum*.

THUYOXYLUM Unger, 1842.

Thuyoxylum juniperinum Unger, 1842 (1841-47), p. 31. See also Unger, 1854, p. 172, pl. 1, figs. 1-3. Various later spellings as: *Thuoxyton* (Unger, 1854); *Thuiosylon* (Unger, 1852); *Thuoxyton* (Unger, 1854); *Thuyosylon* (Roemer, 1852); *Thujosylon* (Hartig, 1848).

THYLAX Renault, 1896.

Thylax britannicus Renault, 1896a, p. 549, fig. 144, alga, in boghead coal; Carboniferous; Autun, France.

THYLLOXYLON Gothan, 1910.

Thylloxyton irregulare Gothan, 1910, p. 34, pl. 6, figs. 2-8; coniferous wood; Upper Jurassic; Green Harbour, Spitzbergen.

THYRSOPORELLA Guembel, 1871.

Thyrsoporella cancellata Guembel, 1871, p. 266, pl. DI, figs. 14a, 14b; Miocene; Parnes, Greece.

THYSANOSPERMA Zalesky, 1937.

Thysanosperma ovatum Zalesky, 1937, p. 87, fig. 57, winged seed; Permian; Matveyevo, USSR.

THYSANOTESTA Nathorst, 1914.

Thysanotesta sagittula Nathorst, 1914, p. 33, pl. 15, figs. 69, 70; seed; Paleozoic; Spitzbergen.

TIETEA Solms-Laubach, 1913.

Tietea singularis Solms-Laubach, 1913, p. 673, pls. 6, 7; petrified fern stem; near São Paulo, Brazil. See also Posthumus, 1931.

TIGILLITES Rouault, 1850.

Tigillites dufrenoyi Rouault, 1850, p. 740; plant?; Silurian; Gahard, Brittany, France. See also Lebesconte, 1883, p. 68, pl. 20, figs. 21-22.

TILIAEPHYLLUM Newberry, 1895.

Tiliacphyllum dubium Newberry, 1895, p. 109, pl. 15, fig. 5; leaf, Tiliaceae; Ambony clays, Cretaceous; New Jersey.

TILIAEPOLLENITES Robert Potonie, 1934.

Tiliacpollenites instructus Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 37, pl. 4, figs. 109-110; pollen, Tiliaceae; Miocene; Oberlausitz, Germany.

TILOXYLON Hartig, 1848.

A new generic name proposed for *Peuce lindleyana* Witham, 1833, p. 70, pl. 9, figs. 1-5. See Hartig, 1848b, p. 137.

TINGIA Halle, 1925.

Tingia carbonica (Schenk) Halle, 1925, p. 5, pl. 1, figs. 1-4; compared with *Noeggerathia*; Permian; China.

TINGIOSTACHYA Kon'no, 1929.

Tingiostachya tetralocularis Kon'no, 1929, p. 145, pl. 23, fig. 5; pl. 24, figs. 4, 5; pl. 27, figs. 1-5; cone of *Tingia*; Jido and Lower Kobosan series, Permian-Triassic; northern Korea.

TINOMISCOIDEA Reid and Chandler, 1933.

Tinomiscoidea scaphiformis Reid and Chandler, 1933, p. 162, pl. 4, figs. 1-4; fruit, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

TINPAHARIA K. Jacob, 1943.

Tinpaharia sinuosa K. Jacob, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 175, fig. 8; Jurassic; Tinpahar, India.

TITANOPHYLLUM Renault, 1890.

Titanophyllum grand'euryi Renault, in Renault and Zeiller, 1890, p. 623, pl. 69, figs. 1-14; leaves, probably Cordaitales; Carboniferous; Commentry, France.

TITHYMALITES Presl, 1838.

Tithymalites bififormis Presl, in Sternberg, 1838 (1820-38), p. 205, pl. 53 figs. 1-6; cordaitan pith cast.

TMEMATOSTROBUS Harris, 1935.

Tmematostrobos eremus Harris, 1935, p. 119, pls. 23, 28; cone, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

TOBLERIA Jongmans and Gothan, 1925.

Tobleria biscuspidis Jongmans and Gothan, 1925, p. 294, pl. 2, figs. 8, 9; seeds?; Upper Carboniferous; Soengei Garling and Soengi Menkarang, Sumatra.

TODEOPSIS Renault, 1896.

Todeopsis primaeva Renault, 1896a, p. 21, fig. 18; sporangia, compared with *Todea*, Osmundaceae; Lower Carboniferous (Culm); Esnost, France.

TODITES Seward, 1900.

Todites williamsoni (Brongniart) Seward, 1900, p. 87, pl. 14, figs. 2, 5, 7; pl. 15, figs. 1-3; pl. 21, fig. 6; foliage, compared with *Todea*, Osmundaceae; Jurassic.

TOMIPHYTON Zalesky, 1937.

Palaeophytographica, p. 27; Moskvau, Akad. Nauk SSSR (not seen, cited in Gothan, 1942b, p. 156).

TOMISTACHYS Zalesky, 1934.

Tomistachys thyrisculus Zalesky, 1934c, p. 772, fig. 37; fructification, incertae sedis; Permian; Ivanovka, Kuznets, Russia.

TORELLIA Heer, 1870.

Torellia rigida Heer, 1870, p. 44, pl. 6, figs. 3-12; pl. 16, fig. 1b; leaf, Taxaceae; Miocene; Cape Staratschin, Spitzbergen. See also Florin, 1936a.

TORREYITES Seward, 1919.

Torreyites carolianus (Berry) Seward, 1919, p. 420; coniferous foliage; middle Cretaceous; North Carolina. For *Tumion carolianum* Berry, 1908, p. 383, figs. 1-3.

TORULITES Pia, 1927.

Torulites conventzi (Felix) Pia, in Hirmer, 1927, p. 124, fig. 116; fungus, Dematiaceae, Fungi Imperfecti; Upper Cretaceous.

TRACHEOTHECA F. W. Oliver, 1904.

Tracheotheca sp. F. W. Oliver, 1904, p. 395 (footnote); sporangium; Upper Carboniferous?; Grand Croix, France. Described but not named in Oliver, 1902, p. 60-67.

TRACHYPHYTON Gothan, 1928.

Trachyphyton neglegibile Gothan, 1928b, p. 296, pl. 14, figs. 3, 4; stem cast; Carboniferous; Peru.

TRAMETITES Meschinelli, 1892.

Trametites pini (Brotero) Meschinelli, in Saccardo, 1892, p. 747. See also Meschinelli, 1898, p. 6, pl. 4, fig. 5; fungus in pine? wood; Upper Cretaceous; Ryedal, Sweden.

TRAPOPHYLLUM Massalongo, 1858.

Trapophyllum europaeum Massalongo, 1858b, p. 768; Tertiary; Italy.

TRAQUAIRIA (Carruthers) Rina Scott, 1911.

Traqualria carruthersii Rina Scott, 1911, p. 463, pl. 39, figs. 5-7; pl. 40, fig. 14; spores or radiolarians?; Lower Coal Measures, Upper Carboniferous; Lancashire and Yorkshire, England. The generic name proposed by Carruthers, 1873, p. 126. See also Williamson, 1880, p. 511.

TREMATOCARYON Mueller, 1871.

Trematocaryon mclellani Mueller, 1871 (1871-82), p. 48, pl. 3; Pliocene; Had-don Goldfield, Nintingbool, Australia.

TREMATOSPHERITES Meschinelli, 1892.

Trematosphaerites lignitum (Heer) Meschinelli, in Saccardo, 1892, p. 751. See also Meschinelli, 1898, p. 17, pl. 9, figs. 24-26; fungus, in *Sequoia couttsiae*; Bovey Tracey, Devon, England.

TREMATOSPHERITES Gruess, 1924.

Trematosphaerites intercellularis Gruess, 1924, p. 77, pl. 6, figs. 17-19; fungus, Devonian; Magdalena Bay, Spitzbergen.

TREMATOXYLON Hartig, 1848.

Trematoxylon leunisi Hartig, 1848c, p. 187; coniferous wood; Tertiary (Braunkohle); Germany.

TREVISANIA Zigno, 1856.

Trevisania furcellata Zigno, 1856a, (1856-68), p. 23, pl. 1, fig. 4; incertae sedis; Middle Jurassic (Lower Oolite); Val d'Assa near Rotzo, Italy.

TRIANThERA Conwentz, 1886.

Trianthera eusideroxyloides Conwentz, 1886, p. 50, pl. 5, figs. 1-5; flower, in amber, Lauraceae; early Tertiary; West Prussia.

TRICALYCITES Newberry, 1895.

Tricalycites papyraceus Newberry, 1895, p. 132, pl. 46, figs. 30-38; incertae sedis; Cretaceous (Amboy clay); Woodbridge, N. J.

TRICARPELLITES Bowerbank, 1840.

Tricarpellites communis Bowerbank, 1840, p. 79, pl. 11, figs. 25-31; London Clay, Eocene; Sheppey, Kent, England.

TRICHOBLASTES Reinsch, 1881.

Trichoblastes sp. Reinsch, 1881, p. 37, pl. 8, figs. 3, 6-8; Middle Triassic (Muschelkalk); Rothenburg, Franconia.

TRICHOBLASTIUM Reinsch, 1881.

Trichoblastium sp. Reinsch, 1881, p. 107, pl. 46a, figs. 1-9; Upper Carboniferous; Zwickau, Saxony.

TRICHODES Reinsch, 1881

Trichodes sp. Reinsch, 1881, p. 88, pl. 28, figs. 1-5; pl. 28a, figs. 1-5; Upper Carboniferous; Zwickau, Saxony.

TRICHOIDES Harkness, 1855.

Trichoides ambiguus Harkness, 1855, p. 474; alga; Silurian; Scotland.

TRICHOMANIDES Tenison-Woods, 1884.

Trichomanides laxum Tenison-Woods, 1884, p. 95, pl. 10, fig. 2; "this fossil cannot be distinguished from *Trichomanes*"; age uncertain; Ipswich, New South Wales.

TRICHOMANITES Goepfert, 1836.

Trichomanites myriophyllum Goepfert, 1836, p. 263; fern of supposed hymenophyllaceous affinities. *See also* Brongniart, 1828-38, pl. 55.

TRICHOPELTINITES Cookson, 1947.

Trichopeltinites pulcher Cookson, 1947b, p. 211, pl. 14, figs. 22, 23; Trichopeltaceae; Oligocene-Miocene; Yallourn and Hazelwood, Victoria.

TRICHOPLHRAGMIUM Reinsch, 1881.

Trichophragmium sp. Reinsch, 1881, p. 105, pl. 44, fig. 206; Upper Carboniferous; Zwickau, Saxony.

TRICHOPHYCUS Miller and Dyer, 1878.

Trichophycus lanosus Miller and Dyer, 1878, p. 25, pl. 1, figs. 3, 4; plant?; Upper Ordovician; Warren County, Ohio.

TRICHOPHYLLUM.

Trichophyllum heteromorpha. Mistake? for *Trichopitys heteromorpha* Saporta, in Grand-Eury, 1877, p. 274.

TRICHOPITYS Saporta, 1875.

Trichopitys heteromorpha Saporta, 1875b, p. 1020; foliage, Coniferales; Permian; Lodève, France. *See also* Renault, 1885, p. 64, pl. 3, fig. 2.

TRICHOPLASMIUM Reinsch, 1881.

Trichoplasmium sp. Reinsch, 1881, p. 26, pl. 10, figs. 1-4; pl. 10a, fig. 5; Upper Carboniferous; Zwickau, Saxony.

TRICHOPTERIS Hall, 1845.

Trichopteris filamentosa Hall, in Fremont, 1845, p. 306, pl. 2, fig. 6; fragment of fern frond; probably from Frontier formation, Upper Cretaceous; Cumberland, Wyo.

TRICHOSPORITES Felix, 1894.

Trichosporites conventzi Felix, 1894a, p. 273; conidia, compared with *Trichosporium*; Upper Cretaceous; Ryedal, Sweden. This genus erroneously attributed to Saccardo in Meschinelli, 1898, p. 80, pl. 22, fig. 5. *See also* Stopes, 1913, p. 270, fig. 25.

TRICOCITES Rode, 1933.

Tricocites trigonum Rode, 1933, p. 172, figs. 1-3; petrified fruit, probably Palmaeae; Intertrappan beds, Tertiary; Mahgaon Kalan, Chhindwara district, Central Provinces, India. *See also* Sahni and Rode, 1937, p. 167.

TRICOILOCARYON Mueller, 1878.

Tricoilocaryon barnardi Mueller, 1878 (1871-82), p. 35, pl. 14, Pliocene; Gulgong, Australia.

TRICOLPITES Erdtman, 1948.

Tricolpites troedssonii Erdtman, 1948, p. 267, figs. 5-10; pollen, dicotyledon; Lower Jurassic (Liassic); Palsjo, Scania, Sweden.

TRIGONOCARPOLITHUS Arnold, 1948.

Trigonocarpolithus typicus Arnold, 1948, p. 139, figs. 2, 13-16; seed cuticle, Trigonocarpales; Saginaw formation, lower Pennsylvanian; Big Chief No. 8 mine, St. Charles; Saginaw County, Mich.

TRIGONOCARPON.

See *Trigonocarpus*.

TRIGONOCARPUM.

See *Trigonocarpus*.

TRIGONOCARPUS Brongniart, 1828.

Trigonocarpus parkinsoni Brongniart, 1828b, p. 137; Brongniart refers to Parkinson, 1804, pl. 7, figs. 6-8. Apparently first described and illustrated in full in Geinitz, H. B., 1855, p. 43, pl. 22, figs. 17-20; see also Scott and Maslen, 1907. Name originally given as *Trigonocarpon* by Brongniart although he adopted *Trigonocarpus* in 1881, p. 39, and this usage has been followed by most later writers, as Seward, 1917; Scott, 1923; Arnold, 1947.

TRILETES Reinsch, 1881.

Triletes reinschi (Ibrahim) Schopf, 1936b, 173, figs. 1, 2; Pennsylvanian.

TRILOBIUM Saporta, 1861.

Trilobium ungeri Saporta, in Heer, 1861, p. 148; flower calyx, Anacardiaceae; Eocene; Provence, France. *See also* Saporta, 1862, p. 279, pl. 13, fig. 6.

TRIMATOPTERIS Corda, 1845.

Trimatopteris speciosa Corda, 1845, p. 106; cited as synonym for *Psaronius speciosus* Corda, 1845, p. 106, pl. 44, figs. 1-4.

TRINOCLADUS Raineri, 1922.

Trinocladus tripolitanus Raineri, 1922, p. 79, pl. 3, figs. 15, 16; siphonaceous alga; Cretaceous (Cenomanian); Uadi Msaaba, Libia.

TRIOOLEPIS Zeiller, 1903.

Trioolepis leclerei Zeiller, 1903, p. 208, pl. 50, fig. 15; cone, some resemblance to *Picea*; Rhaetic; Tonkin. *See also* Seward, 1919, p. 424.

TRIORITES Cookson, 1950.

Triorites magnificus Cookson, 1950, p. 175, pl. 3, figs. 32-35; pollen, Proteaceae?; Oligocene-Miocene; Moorlands, South Australia.

TRIPHYLLOPTERIS Schimper, 1869.

Triphylopteris collombiana Schimper, 1869 (1869-74), p. 479, pl. 107, fig. 13; sphenopteridlike foliage.

- TRIPLICARPUS** Velenovsky and Viniklar, 1926.
Triplicarpus purkynei Velenovsky and Viniklar, 1926, p. 52, pl. 2, fig. 5; fruit, family uncertain; Cretaceous; Vyserovic, Bohemia.
- TRIPOPORELLA** Steinmann, 1880.
Triploporella fraasi Steinmann, 1880, p. 136, pl. 5, figs. 1-8; siphonaceous alga; Cretaceous.
- TRIPLOSPOBITES** Unger, 1850.
Triplosporites brownii Unger, 1850a, p. 270; lycopod cone?; Carboniferous. See also Brown, Robert, 1851, p. 473, pls. 23, 24.
- TRIPTEROCARPUS** Grand'Eury, 1877.
Tripterocarpus sp. Grand'Eury, 1877, p. 519; nom. nud.
- TRIPTEROSPERMUM** Brongniart, 1874.
Tripterosperrum rostratum Brongniart, 1874, p. 262, pl. 22, figs. 6-8; petrified seed, compared with *Trigonocarpus*; Upper Carboniferous; St.-Étienne, France.
- TRITRITRITES** L. R. Wilson and Coe, 1940.
Tritrinitrites arculatus L. R. Wilson and Coe, 1940, p. 185, pl. 1, fig. 8; spore; Des Moines group, Pennsylvanian; Green County coal mine, Franklin Township, Green County, Iowa.
- TRISTACHYA** Lilpop, 1937.
Tristachya raciborskii Lilpop, 1937, p. 2, pl. 1; articulate, cones and foliage; Karnlowice limestone, "Permo-Carboniferous"; Karnlowice, 35 km west of Cracow, Poland.
- TRISTANITES** Saporta, 1865.
Tristanites cloeziaeformis Saporta, 1865, p. 217, pl. 13, fig. 3; infructescence, Myrtaceae; Tertiary; Armissan, France.
- TRISTANITES** Deane, 1902.
Tristanites angustifolia Deane, 1902a, p. 23, pl. 3, fig. 1; pl. 6, fig. 7; Tertiary?; Berwick, Australia.
- TRITICOIDES** De Stefani, 1948.
Triticoides bianchii De Stefani, 1948; grass; Tertiary; Italy.
- TRIZYGIA** Royle, 1840.
Trizygia speciosa Royle, 1840 (1833-1840), p. xxix*, pl. 2, fig. 8; *Sphenophyllum*-like foliage.
- TROCHILISCUS** Karpinsky, 1906.
Trochiliscus ingricus Karpinsky, 1906, p. 112, pl. 2, figs. 23-28; oogonium, Characeae; Devonian; Pawlowsk, Russia.
- TROCHODENDROIDES** E. W. Berry, 1922.
Trochodendroides rhomboideus (Lesqueux) E. W. Berry, 1922b, p. 166, pl. 36, fig. 6; leaf, Trochodendraceae; Woodbine formation, Upper Cretaceous; Arthus Bluff, Tex.
- TROCHODENDROMAGNOLIA** Zander, 1923.
Braunkohle, 1923, Band 22, p. 41 (not seen, cited in Gothan, 1942b, p. 157).
- TROCHOPHYLLUM** Wood, 1861.
Trochophyllum fertilis (Sternberg) Wood, 1861b, p. 438. This is a proposed name change for *Annularia fertilis* Sternberg on the grounds that *Annularia* had been used for a mollusk. Wood gives the spelling *Trochophyllum* in 1861, p. 522.
- TROCOPHYLLUM**.
See *Trochophyllum*.
- TRYPTEROCARPUS** Grand'Eury, 1890.
Trypterocarpus arcuatus Grand'Eury, 1890, p. 310, pl. 4, fig. 14; seed impression; Upper Carboniferous; Traquette, France.
- TSUGAEPOLLENITES** Robert Potonie, 1934.
Tsugaepollenites igniculus Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 17, pl. 1, fig. 8; pollen, compared with *Tsuga*; Miocene; Oberlausitz, Germany.
- TSUGITES** Fliche, 1896.
Tsugites magnus Fliche, 1896, p. 211, pl. 9, fig. 2; petrified cone, Coniferales; Lower Cretaceous (Albien); Clermont, France.
- TUBERCULARITES** Arcangeli, 1903.
Tubercularites iani Arcangeli, in Barsanti, 1903, p. 12; fungus; Upper Carboniferous; Iano, Italy.
- TUBERCULATISPORITES** Ibrahim, 1933.
Tuberculatisporites tuberosus Ibrahim, 1933, p. 22, pl. 3, fig. 27; spore; Carboniferous.
- TUBICAILIS** Cotta, 1832.
Tubicailis solenites (Sprengel) Cotta, 1832, p. 22, pl. 2, figs. 1, 3; petrified fern, Tubicailidaceae (Hirmer, 1927, p. 540); Permian; Chemnitz, Germany.
- TUBICULITES** Grand'Eury, 1877.
Tubiculites relaxatmaximum Grand'Eury, 1877, p. 102; apparently a *Psaronius* stem; no specific designations are given with figures; Upper Carboniferous; France.
- TUMULISTIGMA** Bayer, 1914.
Tumulistigma furculorum Bayer, 1914, p. 64; Cretaceous; Ober-Haatz, Bohemia.
- TUSSILAGITES** Grüss, 1927.
Tussilagites tertiaria Grüss, 1927, p. 205, figs. 1-3; Tertiary; Preschen near Bilin, Bohemia.
- TUZSONIA** Andreanszky, 1949.
Tuzsonia hungarica Andreanszky, 1949, p. 31, illustrated; Palmaceae; Tertiary; Hungary.
- TYCHTOPTERIS** Zalesky, 1930.
Tychtopteris cuneata (Schmalhausen) Zalesky, 1930f, p. 926; Permian; Pechora basin, Russia.

TYLODENDRON C. E. Weiss, 1870.

Tylo dendron speciosum C. E. Weiss, 1870b, p. 47; Upper Carboniferous; Otzenhausen, Prussia.

TYLOPHORA Hick, 1892.

Tylophora radiculosa Hick, 1892a, p. 101, pls. 16, 17; stigmarian "rootstock"; Upper Carboniferous; Cinder Hills, near Halifax, England. This name later withdrawn; see *Xenophyton*.

TYMPANOPHORA Lindley and Hutton, 1837.

Tympanophora simplex Lindley and Hutton, 1837 (1831-37), p. 57, pl. 170; fertile frond, Cyatheaceae; Jurassic (Oolitic); Cloughton Wyke, Scarborough, England. See also Seward, 1910, p. 367.

TYPHACITES Saporta, 1890.

Typhacites rugosus Saporta, 1890, p. 3, pl. 13, fig. 4; leaf fragment, Typhaceae?; Cretaceous; Fuveau, Provence, France.

TYPHAELOIPUM Unger, 1845.

Typhaelotipum lacustre Unger, 1845 (1841-47), p. lxix; leaf fragment of *Typhalike* plant; Miocene; Radoboj. Illustrated in Unger, 1852, p. 90, pl. 30, figs. 6-8; pl. 28, figs. 6, 7.

TYRGAEINA Zalesky, 1944.

Tyrgaeina mamillaris Zalesky, 1944, p. 250.

TYSONIA Fontaine, 1889.

Tysonia marylandica Fontaine, 1889, p. 193, pls. 174-180; petrified trunk, Bennettiales; Potomac group, Lower Cretaceous; Maryland.

U

ULARIA Zalesky, 1937.

Palaeophytographica, p. 10: Moskva, Akad. Nauk SSSR, 1937 (not seen, cited in Gothan, 1942b, p. 157).

ULLMANNIA Goeppert, 1850.

Ullmannia bronni Goeppert, 1850, p. 185, pl. 20, figs. 1-26; cones and foliage; Permian (Zechstein), Frankenberg, Saxony.

ULLMANNITES Tuzson, 1911.

Ullmannites beinertianus (Goeppert) Tuzson, 1911, p. 24, fig. 2.

ULMACITES Caspary, 1886.

Ulmacites succineus Caspary, in Conwentz, 1886, p. 47; leaf, in amber, compared with *Ulmus*; Tertiary.

ULMINIUM Unger, 1842.

Ulmium diluviale Unger, 1842b, p. 174; wood; Tertiary; Bohemia. See also Unger, 1841-48, p. 97, pl. 25, figs. 6-9.

ULMIPHYLLUM Fontaine, 1889.

Ulmiphyllum brookense Fontaine, 1889, p. 312, pl. 155, fig. 8; pl. 163, fig. 7; leaves, compared with *Ulmus*; Potomac group, Lower Cretaceous; Brooke, Va.

ULMIPOLLENITES Wolf.

Ulmipollenites undulosus Wolf, 1934, p. 75, pl. 5, fig. 25; Pliocene; Freigericht mine near Dettlingen, Bavaria.

ULMITES Dawson, 1890.

Ulmites pusillus Dawson, 1890, p. 88, fig. 24; leaf; Tertiary; British Columbia.

ULMOPHYLLUM Ettingshausen, 1887.

Ulmophyllum oblongum Ettingshausen, 1887a, p. 104, pl. 10, figs. 12, 12a; leaf, Ulmaceae; Vegetable Creek, near Emma-ville, New South Wales.

ULMOXYLON Kaiser, 1879.

Ulmoxylon lapidarium (Unger) Kaiser, 1879, p. 100. For *Cottaites lapidarium* Unger, 1842b, p. 176. See also Unger, 1854, p. 182, pl. 7, figs. 1-3.

ULODENDRON Lindley and Hutton, 1831.

Ulodendron majus Lindley and Hutton, 1831 (1831-37), p. 22, pl. 5; lycopod stem impression; Carboniferous; Jarro Colliery, near Newcastle-upon-Tyne, England.

ULODENDROSTROBUS Renier, 1931?

Ulodendrostrobis squarrosus Renier, 1931, p. 276; Westphalien, Upper Carboniferous; coal basin of Charleroi, Belgium.

ULOSPERMUM Pomel, 1849.

Ulospermum conicum (Lindley and Hutton) Pomel, 1849, p. 346. For *Carpolithes conicus* Lindley and Hutton, 1836 (1831-37), p. 101, pl. 189, figs. 1, 2, 4; Jurassic; Malton, England.

ULVITES Reinsch, 1881.

Ulvites sp. Reinsch, 1881, p. 60, pl. 13, figs. 1-5; Upper Carboniferous; Zwiekau, Saxony.

ULVOPTERIS Schuster, 1908.

Ulvopteris ammonis Schuster, 1908, p. 184, fig. 2 facing p. 192; Upper Carboniferous; Germany.

UMBELLIFERITES Engelhardt and Kinkel, 1908.

Umbelliferites sp. Engelhardt and Kinkel, 1908, p. 249, pl. 32, fig. 12; Upper Pliocene; Klärbecken near Niederrad, Hesse.

UMBELLIFEROSPERMUM E. W. Berry, 1929.

Umbelliferospermum latahense E. W. Berry, 1929c, p. 261, pl. 64, figs. 10-12; fruit, Umbelliferae; Latah formation, Miocene; brickyard at Spokane, Wash.

UMKOMASIA Thomas, 1933.

Umkomasia macleani Thomas, 1933, p. 203, pl. 23, fig. 56; figs. 1-4; pteridosperm inflorescence bearing cupulate seeds; Moltano beds, Karroo system, Triassic; Upper Umkomas Valley, Natal. Cited briefly in Thomas, 1931, p. 663.

UNATHECA Kidston, 1891.

Unatheca oblongus Kidston, 1891, p. 32, pl. 3, fig. 33; fertile coenopterid? frond; Radstock series, Upper Carboniferous; Camerton, Somerset, England.

UNCINULITES Pampaloni, 1902.

Uncinulites baccarinii Pampaloni, 1902, p. 125, pl. 10, fig. 7; fungus perithecia; Miocene?; Sicily.

UNGERIA Salfeld, 1908.

Ungeria solnhofensis Salfeld, 1908, p. 385, fig. p. 385; fern frond; Jurassic; Solenhofen, Bavaria.

UNGERITES Schleiden, 1855.

Ungerites tropicus Schleiden, in Schmid and Schleiden, 1855, p. 37; wood; Leguminosea?; Oligocene; Koistenblatt, Bohemia.

UPHANTENIA Vanuxem, 1842.

Uphantenia chemungensis Vanuxem, 1842, p. 184, fig. 50; plant?; Chemung group, Upper Devonian; New York.

URALIDIUM Zalessky, 1939.

Uralidium singulare Zalessky, 1939 b, 373, fig. 57; incertae sedis; Permian; Matveyevo, USSR.

URALOBAIERA Zalessky, 1939.

Uralobaiera bairmica Zalessky, 1939b, p. 361, fig. 41; incertae sedis; Permian; Matveyevo, USSR.

URALODENDRON Zalessky, 1939.

Uralodendron verticillatum Zalessky, 1939b, p. 368, fig. 50; foliage twig, Coniferales?; Permian; Matveyevo, USSR.

URALOPHYLLUM Krystofowitsch and Prynada, 1933.

United Geol. Prosp. Service USSR, 1933, Trans. 346, p. 25 (not seen), cited in Gothan, 1942b, p. 157.

URALOPTERIS Zalessky, 1939.

Uralopteris valida Zalessky, 1939b, p. 355, fig. 34; fern? pinule fragment; Permian; Mikhailovskoie, USSR.

URALOSPERMA Zalessky, 1939.

Uralosperma insigne Zalessky, 1939b, p. 372, fig. 55; seed; Permian; Sivkova, USSR.

URANIOPHYLLITES Savi, 1843.

Uraniophyllites spathulata Sayi, 1843, p. 75, pl. 1 fig. 8; Miocene; Monte Bamboli, Italy.

UREDINITES Velenovsky, 1889.

Uredinites cretaceous Velenovsky, 1889, p. 29, pl. 3, fig. 14; Upper Cretaceous (Cenomanian); Vyserovic, Bohemia.

URNATOPTERIS Kidston, 1884.

Urnatopteris tenella (Brongniart) Kidston, 1884, p. 594; fertile sphenopterid foliage; Upper Carboniferous; various localities, Scotland, England. For *Sphenopteris tenella* Brongniart, 1828a-38, p. 186, pl. 49, fig. 1.

UROHELMINTHOIDA Sacco, 1888.

Urohelminthoida dertonensis Sacco, 1888, p. 184, pl. 2, figs. 8, 16; probably not a plant; Eocene; Lombardy, Italy.

UROMYCEITITES C. F. W. Braun, 1840.

Uromyces concentricus C. F. W. Braun, 1840, p. 93; nom. nud.; Triassic; Eckersdorf, Bavaria.

UROPHYLYCTITES Magnus, 1903.

Urophylyctites oliverianus Magnus, 1903, p. 249; fungus; Carboniferous. Apparently first illustrated species: *Urophylyctites stigmariæ* Weiss, 1904b, p. 68, figs. 66, 67.

UROPLASMIUM Reinsch, 1881.

Uroplasmium sp. Reinsch, 1881, p. 46, pl. 6, figs. 4-8; Upper Carboniferous; Zwickau, Saxony.

URSATOPTERIS.

Error for *Urnatopteris*, in Kidston, 1884b, p. 295.

URTICICARPUM Reid and Chandler, 1933.

Urticicarpum scutellum Reid and Chandler, 1933, p. 146, pl. 3, fig. 14; fruit, Urticaceae?; London Clay, Eocene, Minster, Kent, England.

UTERIA Michelin, 1847.

Uteria encrinella Michelin, 1845 (1840-47), p. 177, pl. 46, fig. 26; alga?; Upper Cretaceous; Cuise-la-Motte, France.

UTRICULARITES Massalongo, 1857.

Utricularites protogaeus Massalongo, in Massalongo and Scarabelli, 1857, p. 11; for illustrations, see Massalongo and Scarabelli, 1859, pls. 3, 4; incertae sedis; Miocene; Sinigaglia, Italy.

V

VACCINOPHYLLUM Dawson, 1890.

Vaccinophyllum quæstum Dawson, 1890, p. 88, fig. 23; leaf; Tertiary; Similkameen River, British Columbia.

VALERIANELLITES Saporta, 1862.

Valerianellites capitatus Saporta, 1862, p. 260, pl. 10, fig. 3; inflorescence Rubiaceae?; Tertiary; Aix, Provence, France.

VALIDOPTERIS Paul Bertrand, 1932.

Reference not seen; cited in Gothan, 1942b, p. 157.

VALLISNERITES Heer, 1878.

Vallisnerites jurassicus Heer, 1878b, p. 8, pl. 1, figs. 22-27; grasslike leaves; Jurassic; Ust-Balei, Siberia.

VALONITES Sordelli, 1873.

Valonites utriculosus Sordelli, 1873, p. 367, fig. C; incertae sedis; Pliocene; Lombardy, Italy.

VALVISPORITES Ibrahim, 1933.

Valvisporites trilobus Ibrahim, 1933, p. 33, pl. 4, fig. 30; spore; Carboniferous.

VARDEKLOEFTIA Harris, 1932.

Vardekloeftia sulcata Harris, 1932b, p. 109, pls. 15, 17, 18; female portion of cone (gynaecium), Bennettitales; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

VARIOLARIA Sternberg, 1820.

Variolaria ficoides Sternberg, 1820 (1820–38), p. 22, pl. 12, figs. 1, 2; *Stigmaria*; Carboniferous.

VECTIA Stopes, 1915.

Vectia luccombensis Stopes, 1915, p. 247, pls. 23–25; petrified phloem; Lower Greensand, Cretaceous; Isle of Wight, England.

VERBENOPHYLLUM Ettingshausen, 1858.

Verbenophyllum aculeatum Ettingshausen, 1858, p. 749, pl. 3, fig. 11; Miocene; Koeflach, Styria.

VERMICULITES Rouault, 1850.

Vermiculites panteri Rouault, 1850, p. 744; plant?; Silurian; Guichen, Brittany, France.

VERMIPORELLA Stolley, 1893.

Vermiporella fragilis Stolley, 1893, p. 140, pl. 8, figs. 7–11; siphonaceous alga; Silurian.

VERONICITES Heer, 1859.

Veronicites oeningensis Heer, 1859, p. 191, pl. 153, fig. 54; seeds, Labiatae?; Miocene; Oeningen, Switzerland.

VERRUCANIA Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 157.

VERRUCARITES Goeppert, 1844.

Verrucarites geanthracis Goeppert, 1844, p. 195; nom. nud.

VERRUCOSISPORITES Ibrahim, 1933.

Verrucosisporites verrucosus Ibrahim, 1933, p. 25, pl. 2, fig. 17; spore; Carboniferous.

VERTEBRARIA Royle, 1840.

Vertebraria indica Royle, 1840 (1833–40), p. xxix*, pl. 2, figs. 1–3; stem, possibly of *Glossopteris*; shales of Ranigunj and Chinnakooree, India; "Permo-Carboniferous." See also Walton and Wilson, 1932.

VESQUIA C. E. Bertrand, 1883.

Vesquia tournaisii C. E. Bertrand, 1883, p. 1382; seeds, Taxaceae?; Cretaceous?; Tournai, France.

VETACAPSULA.

See discussion by Brown, R. W., 1950.

VEXILLUM Rouault, 1850.

Vexillum labechei Rouault, 1850, p. 734; Silurian; Brittany, France.

VIATCHESLAVIA Zalessky, 1936.

Viatcheslavia vorcutensis Zalessky, 1936b, p. 240, figs. 6, 7; lycopod leaf bases; Permian; Russia.

VIBURNIPHYLLUM Nathorst, 1886.

Viburniphyllum giganteum (Saporta) Nathorst, 1886a, p. 52. For *Viburnum giganteum* Saporta, 1868, p. 370, pl. 30, figs. 1, 2.

VIBURNITES Lesquereux, 1892.

Viburnites crassus Lesquereux, 1892, p. 124, pl. 45, figs. 1–4; leaf, Caprifoliaceae; Cretaceous; 10 miles northeast of Delphos, Kans.

VIBURNOIDITES Robert Potonie, 1950.

Viburnoidites sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62.

VILLARSITES Münster, 1842.

Villarsites ungeri Münster, 1842 (1839–43), p. 109, pl. 4, fig. 5.

VILLERSIA Stockmans, 1948.

Villersia radians Stockmans, 1948, p. 69, pl. 10, figs. 6, 7; Upper Devonian; Belgium.

VIRACARPON Sahni, 1934.

Viracarpum hexasperum Sahni, 1934, p. 318; fruit, monocotyledon; Intertrappean series, Tertiary; India. See also Sahni, 1940, pl. 3, fig. 13; and Sahni, 1944, p. 81, pl. 3, figs. 25–28.

VISCOPHYLLUM Knoll, 1904.

Viscophyllum morloti (Unger) Knoll, 1904, p. 67, pl. 4; leaf, Lorantheae; Miocene; Kumber, Styria.

VITICOCARPUM Menzel, 1913.

Viticarpum pusillum Menzel, 1913, p. 62, pl. 5, fig. 36; fruit, Verbenaceae; Tertiary (Braunkohle); Germany.

VITIGENE Saporta, 1865.

Vitigene cissoides Saporta, 1865, p. 48; leaf, compared with *Cissus adnata*; Tertiary; France.

VITIPHYLLUM Nathorst, 1888.

Vitiphyllum raumanni Nathorst, 1888, p. 211, pl. 22, fig. 2; leaf, compared with *Vitis*; Tertiary; Sakugori, Shimano, province, Japan.

VITIPHYLLUM Fontaine, 1889.

Vitiphyllum crassifolium Fontaine, 1889, p. 308, leaves, compared with *Vitis*; Potomac group, Lower Cretaceous; near Potomac Run, Va.

VITIPITES Wodehouse, 1933.

Vitipites dubius Wodehouse, 1933, p. 514, fig. 47; pollen, Vitaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

VITOXYLON Schuster, 1911.

Vitoxylon coheni Schuster, 1911a, p. 541, pl. 20; wood, Vitaceae; early Tertiary

VOLKELIA Solms-Laubach, 1896.

Volkelia refracta (Goeppert) Solms-Laubach, 1896, p. 58. For *Sphenopteris refracta* Goeppert, 1852, p. 141, pl. 12; Lower Carboniferous; Falkenberg, Silesia.

VOLKMANNIA Sternberg, 1825.

Volkmannia distachya Sternberg, 1825 (1820–38), Tentamen, p. xxx, pl. 48, figs. 3a, 3b; articulate stem and cone impression; Carboniferous; Bohemia.

VOLNOVAKHIA Zalesky, 1931.

Acad. Sci. U. S. S. R. Bull., 1931, p. 582 (not seen, cited in Gothan, 1942b, p. 158).

VOLTZIA Brongniart, 1828.

Voltzia brevifolia Brongniart, 1828d, p. 449, pl. 15; pl. 16, figs. 1, 2. See also Florin, 1944, p. 492.

VOLTZIOPSIS Henry Potonie, 1899.

Voltziopsis coburgensis (Schauroth) Henry Potonie, 1899, p. 304. For *Voltzia coburgensis* Schauroth, 1852, p. 540, fig. p. 539; Triassic (middle Keuper); Coburg, Prussian Saxony.

VOLTZIOXYLON Torrey, 1923.

Voltzioxylon dockumense Torrey, 1923, p. 64, pl. 8, figs. 1, 2; wood, Coniferales; Dockum group, Triassic; Spur, Tex.

VOLTZITES Tuzson, 1911.

Voltzites hungarica (Heer) Tuzson, 1911, p. 36. For *Voltzia hungarica* Heer, 1876, K. Ungarischen geol. Anst. Jahrb., Band 5, p. 12, pl. 22, figs. 1-5; pl. 23, figs. 1-4, Budapest.

VOLUBILITES Liburnau, 1901.

Volubilites praecarbonicus (Gümbel) Liburnau, 1901, p. 566. For *Taenidium praecarbonicum* Gümbel, 1879, p. 535; Carboniferous (Lower Culm); Wurzbach, Prussian Saxony.

W

WAHPIA Walcott, 1919.

Wahpia insolens Walcott, 1919, p. 239, pl. 57, fig. 1; alga, Rhodamelaceae; Stephen formation, Middle Cambrian; great "fossil bed" on northwest slope of Mt. Stephen, above Field, British Columbia.

WALCHIA Sternberg, 1825.

Walchia filiciformis (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xxii. For *Lycopodiolites filiciformis* Schlotheim, 1820, pl. 24; coniferous foliage twigs; Wettin, Germany. See also Florin, 1951, p. 316.

WALCHIANTHUS Florin, 1940.

Walchianthus cylindraceus Florin, 1940b, p. 269, pls. 155, 156, figs. 11-21; cones, Coniferales; Lower Permian; Otten-dorf, near Braunau, Germany. Florin notes that, because this is an artificial genus, no type species is designated. The above is the first one described.

WALCHIOPREMNON Florin, 1940.

Walchiopremnon (Lebachia) valdajolense (Mougeot) Florin, 1940b, p. 277, pls. 157, 158, figs. 18-20; pls. 159, 160, figs. 1-23; petrified stem, Coniferales; Lower Permian; Fayment (Val-d'Ajol), France. Florin (p. 273) notes that, because this is an artificial genus, no type species is designated; *valdajolense* is the only species described.

WALCHIOSTROBUS Florin, 1940.

Walchiostrobus (Lebachia?) gothanii Florin, 1940b, pls. 151, 152, figs. 47-52; pls. 153, 154, figs. 1-10; cone, Coniferales; Lower Permian; Thüringer Wald, Germany. Florin (p. 261) notes that, because this is an artificial genus, no type species is designated. The species above in the first one described.

WALDENBURGIA Gothan, 1950.

Waldenburgia corynepteroides Gothan, 1950, pl. 1; fertile fern frond, possibly primitive Schizaeaceae; lowermost Carboniferous; Waldenburg.

WALKOMIA Schuster, 1931.

Walkomia Schuster, 1931, p. 256.

WALKOMIA Florin, 1940.

Walkomia australis (Feistmantel) Florin, 1940a, p. 8, pls. 1-4; foliage shoots, Coniferales; Newcastle series, Upper Permian; Bowenfels, near Lithgow, New South Wales.

WALKOMIELLA Florin, 1944.

Walkomiella australis (Feistmantel) Florin, 1944, p. 370. For *Walkomia australis* (Feistmantel) Florin, see above.

WAPUTIKIA Walcott, 1919.

Waputikia ramosa Walcott, 1919, p. 236, pl. 54, fig. 2; alga, Rhodamelaceae; Burgess shale, Stephen formation, Middle Cambrian; above Field, British Columbia.

WARDIA David White, 1904.

Wardia fertilis David White, 1904, p. 329, pl. 48; this name given to seeds borne by foliage described as *Aneimites fertilis* Ward; Thurmond formation, lower Pottsville, Pennsylvanian; near Nuttall, W. Va.

WEEDIA Walcott, 1914.

Weedia tuberosa Walcott, 1914, p. 108, pl. 11, figs. 1, 2; alga, Cyanophyceae?; Siyeh limestone, Algonkian; above Lake McDonald, Glacier National Park, Mont.

WEICHSELIA Stiehler, 1857.

Weichselia ludovicae Stiehler, 1857, p. 73, pls. 12, 13; Upper Cretaceous; Quedlin-burgh, Prussian Saxony.

WEISSITES Goepfert, 1836.

Weissites vescicularis Goepfert, 1836, p. xiv. For *Neuropteris conferta* Sternberg, 1833 (1820-38), p. 75, pl. 22, fig. 5.

WELTRICHIA V. F. W. Braun, 1847.

Weltrichia mirabilis C. F. W. Braun, 1847, p. 86. See also Braun, C. F. W., 1849, p. 710, pl. 2, figs. 1-3.

WESTERSHEIMIA Krasser, 1918.

Westersheimia pramelreuthensis Krasser, 1918, p. 549; cycadophyte stem fragment; Upper Triassic; Pramelreith, Lunz, Austria.

WETHERELLIA Bowerbank, 1840.
Wetherellia variabilis Bowerbank, 1840, p. 89, pl. 12, figs. 1-40; fruits, Linaceae; London Clay, Eocene; Sheppey, Kent, England.

WHITTLESEYA Newberry, 1853.
Whittleseya elegans Newberry, 1853a, p. 106; microsporangiate organ, Pteridospermae; Pennsylvanian; Cuyahoga Falls and Poland, Ohio. *See also* Newberry, 1853b, fig. p. 116; Halle, 1933; Schopf, 1948.

WIDDRINGTONITES Endlicher, 1847.
Widdringtonites ungeri Endlicher, 1847, p. 271. For *Juniperites baccifera* Unger, 1843 (1841-47), p. 80, pl. 21, figs. 1-3.

WIDDRINGTONOXYLON Penny, 1947.
Widdringtonoxylon borealis Penny, 1947, p. 287, figs. 13, 15, 16; wood, Coniferales; Magothy formation, Upper Cretaceous; Deep Cut, west of Summit Bridge, Del.

WIELANDIA Nathorst, 1909.
Wielandia angustifolia Nathorst, 1909a, p. 22, pls. 5, 6; cycadophyte cones and foliage; Rhaetic; Bjuf, Sweden. *See Wielandiella*.

WIELANDIELLA Nathorst, 1910.
Wielandiella angustifolia Nathorst, 1910. A name that Nathorst substituted for *Wielandia*; it appears on errata slip (dated Jan. 7, 1910) to title page of Nathorst, 1909a.

WILKINSONIA Mueller, 1879.
Wilkinsonia filaminata Mueller, 1879 (1877-79), p. 170, pl. 3, fig. 4; Pliocene; Gulgong, Australia.

WILLIAMSONIA Carruthers, 1870.
Williamsonia gigas (Lindley and Hutton) Carruthers, 1870, p. 693. As treated by Carruthers, *W. gigas* consists of a combination of the foliage described by Lindley and Hutton as *Zamia gigas* and fructifications originally figured, but not named, by Young and Bird, 1822, p. 183, pl. 2, figs. 2, 6. Williamson, 1870, gave an exhaustive description of the latter. For additional information, *see* Seward, 1917, p. 421-423; Sahni, 1932d.

WILLIAMSONIELLA Thomas, 1915.
Williamsoniella coronata Thomas, 1915, p. 115, pls. 12-14; strobilus, Bennettitales; Gristhorpe plant bed, Jurassic; Yorkshire, England.

WILSONIA Kosanke, 1950.
Wilsonia vesicatus Kosanke, 1950, p. 54, pl. 14, figs. 1-3; spore; LaSalle coal bed, Pennsylvanian; Bureau County, Ill.

WINCHELLIA Lesquereux, 1893.
Winchellia triphylla Lesquereux, 1893, p. 209, pl. 8; leaf, Berberidaceae; Cretaceous; Yellowstone River near mouth of Powder River.

WINCHELLINA Herzer, 1893.
Winchellina fascina Herzer, 1893c, p. 286, pl. 6; apparently a *Psaronius* trunk; Upper Carboniferous; Monroe County, Ohio.

WINDWARDIA Florin, 1936.
Windwardia crookallii Florin, 1936b, p. 91, pl. 21, figs. 1-10; pls. 17-20; structurally preserved foliage, Ginkgoales; Jurassic; Franz Joseph Land.

WITHAMIA Unger, 1842.
Withamia styriaca Unger, 1842b, p. 177; wood, incertae sedis; Tertiary; Styria.

WITHAMIA Seward, 1895.
Withamia armata (Saporta) Seward, 1895, p. 174, pl. 2, figs. 1, 2; pl. 5, fig. 1; cycadophyte frond fragment?; Wealden; Ecclesbourne, England. This is an especially confusing case. On page 174 the name is given as *Withamia saportae* although Seward states that he is transferring Saporta's *Cycadorachis armata* to the new genus *Withamia*. The plates bear the generic name *Saportia*, but the captions opposite the plates bear the footnote that the name *Saportia* was abandoned (after the plates were engraved) in view of its closeness to *Saportaea*, a previously established genus. *Withamia*, itself being in alid, was later changed to *Sewardia* by Zeiller.

WOBURNIA Stopes, 1912.
Woburnia porosa Stopes, 1912, p. 92, pl. 7, fig. 7; pl. 8, fig. 8; wood, dicotyledon; Lower Greensand, Aptian, Lower Cretaceous; Woburn Sands, Bedfordshire, England.

WONNACOTTIA Harris, 1942.
Wonnacottia crispa Harris, 1942b, p. 577, figs. 1-3; microsporophyll, Bennettitales; Middle Estuarine, Jurassic; Cayton Bay, Yorkshire, England.

WOODWORTHIA Jeffrey, 1910.
Woodworthia arizonica Jeffrey, 1910, p. 330, pls. 31, 32; wood, Araucariaceae; Triassic; Arizona.

X

XANTHOLITHUS (Ward) Cockerell, 1926.
Xantholithus hastatiformis Cockerell, 1926a, p. 11. For *Ophioglossum hastatiforme* Cockerell, 1924, p. 10, fig. p. 10, incertae sedis; Eocene; Tipperary, Wyo. [The binomial *Xantholithus propheticus* created by Ward, 1915, p. 150; nom. nud.]

XANTHOXYLUM.
 Error for *Zanthoxylum*, in Yabe and Endo, 1930, p. 600.

XENOCLADIA Arnold, 1940.
Xenocladia medullosina Arnold, 1940, p. 61, figs. 4, 6, 7; Tully limestone, Middle Devonian; Erie County, N. Y.

XENOPHYTON Hick, 1892.

Xenophyton radiolosa Hick, 1892a, p. 216.
For *Tylophora radiculosa* Hick, 1892b,
p. 101, pls. 16, 17.

XENOPTERIS C. E. Weiss, 1870.

Xenopteris brardi (Brongniart) C. E.
Weiss, 1870a, p. 765. For *Odontopteris*
brardi Brongniart, 1828a-38, pls. 75,
76; fernlike foliage; Carboniferous.

XENOTHECA E. A. N. Arber and Goode, 1915.

Xenotheca devonica E. A. N. Arber and
Goode, 1915, p. 96, pl. 4, figs. 1-7;
pteridosperm cupule?; Devonian; Devon,
England.

XENOXYLON Gothan, 1905.

Xenoxylon latiporosum (Cramer) Gothan,
1905, p. 38. For *Pinites latiporosus*
Cramer, in Heer, 1868, p. 176, pl. 40,
figs. 1-8. See also Gothan, 1910, p. 23,
pl. 4, figs. 7-11; pl. 5, figs. 1, 2.

XIPHOPHYLLUM Zalesky, 1930.

Xiphophyllum kuliki Zalesky, 1930f, p.
917; nom. nud.; Permian; Pechora
basin, Russia.

XULINOSPRIONITES Bowerbank, 1840.

Xulinosprionites latus Bowerbank, 1840,
p. 143, pl. 17, figs. 43, 44; fruit, incertae
sedis; London Clay, Eocene; Sheppey,
Kent, England.

XYLOCARYA Reid and Chandler, 1933.

Xylocarya tricularis Reid and Chandler,
1933, p. 312, pl. 14, figs. 9-12; endocarp,
Anacardiaceae; London Clay, Eocene;
Sheppey, Kent, England.

XYLOCARYON Mueller, 1875.

Xylocaryon lockii Mueller, 1875 (1871-
82), p. 41, pl. 11; Pliocene; Ninting-
bool, Victoria.

XYLOIS Stenzel, 1872.

Xylois antiquensis (Unger) Stenzel, 1872,
p. 71. For *Fasciculites antiquensis*
Unger, in Martius, 1846, p. lviii, pl. 2,
figs. 5-7.

XYLOLITHES Debey, 1848.

Xyloolithes sp. Debey, 1848, p. 124; nom.
nud.

XYLOMASTIXIA Kirchheimer, 1938.

Xylomastixia lusatica Kirchheimer, 1938b,
p. 348, pl. 7, figs. 1-6; endocarp, Corna-
ceae; Oligocene; Germany.

XYLOMIDES (Unger) Schimper, 1869.

Xylomides umbilicatus (Unger) Schimper,
1869, p. 138, pl. 1, fig. 8; fungus; Terti-
ary; Radoboj, Croatia.

XYLOMITES Unger, 1841.

Xylomites umbilicatus Unger, 1841 (1841-
47), p. 3, pl. 1, fig. 2; fungus; Tertiary;
Radoboj, Croatia. This genus errone-
ously attributed to Persoon in Meschi-
nelli, 1892, p. 791.

XYLOPHYLLITES Massalongo, 1858.

Xylophyllites pelagica Massalongo, 1858a,
p. 114; for illustration, see Massalongo
and Scarabelli, 1859, pl. 35, figs. 18a,
18b; leaf Euphorbiaceae; Miocene;
Sinigaglia, Italy.

XYLOPSARONIUS Pohl, 1910

Xylopsaronius cottai (Corda) Pohl,
1910, p. 335, figs. 1-3. See also Post-
humus, 1931.

XYLOPTERIS Frangueli, 1943.

Xylopteris elongata (Carruthers) Fren-
guelli, 1943a, p. 324, figs. 30, 31;
pteridosperm frond?; Upper Triassic;
Queensland, Tasmania, Natal, etc.

XYLOPHYLLUM Zalesky, 1927.

Xylophyllum kuliki Zalesky, 1927a, p. 52,
pl. 44, fig. 6; cordaitelike leaf; Jurassic;
Pechora basin, Russia.

Y

YABEIELLA Oishi, 1931.

Yabeiella brachebuschiana (Kurtz) Oishi,
1931a, pl. 26, figs. 4-6; taeniopterid
foliage; Rhaetic; Argentina.

YAKIA David White, 1929.

Yakia heterophylla David White, 1929, p.
86, pl. 39, figs. 1-8; pteridosperm? foli-
age, associated fructifications compared
with *Ullmannia bronni*; Hermit shale,
Permian; near Bright Angel Trail, be-
low El Tovar, Ariz.

YARRAVIA Lang and Cookson, 1935.

Yarravia oblonga Lang and Cookson, 1935,
p. 437, pl. 32, figs. 37-41; terminal syn-
angial fructification; Silurian (Lower
Ludlow); Victoria, Australia.

YATESIA Carruthers, 1874.

Yatesia morrisii (Morris and Carruthers)
Carruthers, 1874, p. 688, pl. 55, figs.
3-6; cycadophyte trunk; Lower Green-
sand, Cretaceous; Leighton-Buzzard,
Potton, Bedfordshire, England. Name
cited by Carruthers, 1868, p. 80; nom.
nud.

YEZONIA Stopes and Fujii, 1910.

Yezonia vulgaris Stopes and Fujii, 1910, p.
23, pl. 2, figs. 5-8; pl. 3, fig. 9; pl. 4,
fig. 19; petrified gymnosperm stem; Up-
per Cretaceous; Hokkaido, Japan.

YEZOSTROBUS Stopes and Fujii, 1910.

Yezostrobus oliverii Stopes and Fujii, 1910,
p. 33, figs. 12-14; pl. 1, fig. 8; pl. 3,
figs. 10-13; cone, Coniferales; Upper
Cretaceous; Hokkaido, Japan. Name
cited in Stopes and Fujii, 1909, p. 558;
nom. nud.

YORKIA Wanner, 1900.

Yorkia gramineoides Ward, 1900, p. 254,
pl. 34, figs. 4-6; grasslike leaves; Trias-
sic; York Haven, York County, Pa
[The generic description is given by
Aureus Wanner and the description for
the type species by Lester Ward.]

YUBARIA Ogura, 1932.

Yubaria invaginata Ogura, 1932b, p. 476, pl. 24, figs. 14-17; petrified petiole, dicotyledon; Cretaceous; Hokkaido, Japan.

YUCCITES Martius, 1822.

Yuccites microlepis Martius, 1822, p. 136.

YUCCITES Schimper and Mougeot, 1844.

Yuccites vogesiacus Schimper and Mougeot, 1844, p. 42, pl. 21; incertae sedis; Triassic; Soultz-les-Bains, Alsace-Lorraine.

YUKNESSIA Walcott, 1919.

Yuknessia simplex Walcott, 1919, p. 235, pl. 54, fig. 1; alga, Chlorophyceae; Stephen formation, Middle Cambrian; Burgess pass fossil quarry, above Field, British Columbia.

Z

ZALESSKYA Kidston and Gwynne-Vaughan, 1908.

Zalesskya gracilis Kidston and Gwynne-Vaughan, 1908, p. 220, pl. 1, figs. 1-3; pl. 2, figs. 4, 5, 8; pl. 3, figs. 9, 10; petrified stem, Osmundaceae; Upper Permian; Bjelebei district, Orenburg, Russia. See also Posthumus, 1931.

ZALESSKYELLA Tschirkova, 1939.

Zalesskyella bifurcata Tschirkova, in Zalessky, 1939b, p. 355, fig. 33; fern? frond fragment; Permian; Tschekarda, USSR.

ZAMIOIDEA Schuster, 1931.

Zamioidea macrozamioides Schuster, 1931, p. 188. For *Cycadocarpidium macrozamioides* Schuster, 1911, Svenska vetensk. akad. Handl., band 51, p. 5, fig. 11.

ZAMIOLEPIS Pomel, 1846.

Zamiolepis dissecta Pomel, 1846, p. 653; nom. nud.; Jurassic; Moselle, France.

ZAMOPHYLLUM Nathorst, 1890.

Zamophyllum buchianum (Ettingshausen) Nathorst, 1890, p. 46, pl. 2, figs. 1, 2; pl. 3, pl. 5, fig. 2; cycadophyte leaf; Mesozoic; Togodani, Tosa province, Japan.

ZAMIOPSIS Fontaine, 1889.

Zamiopsis pinnatifida Fontaine, 1889, p. 161, pl. 61, fig. 7; pl. 62, fig. 5; pl. 64, fig. 2; fern? foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.

ZAMIOPTERIS Schmalhausen, 1879.

Zamiopteris glossopteroides Schmalhausen, 1879, p. 80, pl. 14, figs. 1-3; *Glossopteris*-like leaf; Permian; Ssuka, Russia.

ZAMIOSTROBUS Endlicher, 1836.

Zamiostrobis macrocephala (Lindley and Hutton) Endlicher, 1836 (1836-40), p. 72. For *Zamia macrophylla* Lindley and Hutton, 1834 (1831-37), p. 117, pl. 125, cone, Coniferales?; Cretaceous; England. See also Seward, 1917, p. 503.

ZAMIPHYLLUM Caspary and Klebs, 1907.

Zamiphyllum sambiensis (Caspary) Caspary and Klebs, 1907, p. 63, pl. 8, fig. 51; Tertiary; Baltic Prussia.

ZAMITES Brongniart, 1828.

Owing to innumerable name changes in the cycadophyte leaf genera, it is extremely difficult to cite type species, especially for *Zamites*. The following is rather arbitrarily suggested: *Zamites gigas* (Lindley and Hutton) Morris, 1843, p. 24. For *Zamia gigas* Lindley and Hutton, 1835 (1831-37), p. 45, pl. 165; cycadophyte leaf; Jurassic; Scarborough, England. See discussion in Seward, 1917, p. 529-532.

ZANICHELLIOPSIS Massalongo, 1851.

Zanichelliopsis repens Massalongo, 1851, p. 46; nom. nud.; Eocene; Monte Bolca, Italy. Later changed to *Halochloris repens* (Massalongo) Stiehler, 1869.

ZEARAMOSUS Webster, 1920.

Zearamosus elliaria Webster, 1920, p. 286; marine alga; Devonian; Bloody Run, Iowa.

ZEILLERIA Kidston, 1884.

Zeilleria delicatula (Sternberg) Kidston, 1884a, p. 592, pl. 25; Pteridospermae; Upper Carboniferous; Forest of Wyre, Worcestershire, England. See also Kidston, 1924, p. 427.

ZEILLEROPTERIS Koidzumi, 1936.

Zeilleropteris yunnanensis Koidzumi, 1936, p. 135. For *Gigantopteris nicotinaefolia* Zeller, 1907, Annales mines, sér 10^e, tome 11, p. 480, pl. 14, fig. 15, 15a; Sine-si-Kou, Yunnan, China.

ZEITES Caspary, 1874.

Zeites succineus Caspary, 1872, p. 17; nom. nud.

ZELKOVOIDITES Thiergart?, 1950.

Zelkvoidites sp. in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 57, pl. C, fig. 24; pollen; Pliocene; Chatt-Aquitana, Germany.

ZEUGOPHYLLITES Brongniart, 1828.

Zeugophyllites calamoides Brongniart, 1828b, p. 121, leaf; Carboniferous. First fully described species appears to be *Z. elongatus* Morris, in Strzelecki, 1845, p. 250, pl. 6, fig. 5.

ZIMMERMANNIA Gothan and Zimmerman, 1932.

Zimmermannia eleutherophylloides Gothan and Zimmerman, 1932, p. 113, pl. 13, fig. 4; Upper Devonian; Upper Bögen-dorf, Silesia.

ZINGIBERITES Heer, 1859.

Zingiberites multinervis Heer, 1859, p. 172, pl. 148, figs. 13-15; leaf fragments, Scitamineae?; Miocene; Rossberg, Rhinish Prussia.

ZIPPEA Corda, 1845.

Zippea disticha Corda, 1845, p. 76, pl. 26; incertae sedis; Carboniferous. *See also* Posthumus, 1931.

ZITTELIA Felix, 1882.

Zittelina elegans Felix, 1882a, p. 73, fig. 2; wood, Leguminosae?

ZITTELINA (Munier-Chalmas) Morellet and Morellet, 1913.

Zittelina elegans Morellet and Morellet, 1913, p. 27, pl. 3, figs. 5, 6; alga, Bortellées; Eocene; Grignon, France.

ZIZYPHITES Kuntze, 1904.

Zizyphites Kuntze, in Post and Kuntze, 1904, p. 600.

ZIZYPHOIDES Seward and Conway, 1935.

Zizyphoides colombi (Heer) Seward and Conway, 1935b, p. 23, fig. 8; leaf fragment, Rhamnaceae; Mesozoic; Kagdlungauk, west Greenland.

ZONALASPORITES Ibrahim, 1933.

Zonalasporites ulughbeki Ibrahim, 1933, p. 38, pl. 1, fig. 11; spore; Carboniferous.

ZONALESSPORITES Ibrahim, 1933.

Zonalessporites saturnoides Ibrahim, 1933, p. 27, pl. 3, fig. 26; spore; Carboniferous.

ZONALOSPORITES Ibrahim, 1933.

Zonalosporites vittatus Ibrahim, 1933, p. 41, pl. 6, fig. 45; spore; Carboniferous.

ZONARIDES Schimper, 1869.

Zonarides digitatus (Brongniart) Schimper, 1869 (1869-74), p. 186, pl. 3, fig. 2; described as alga; shows some resemblance to ginkgophyte leaf?; Permian; Mansfield, Prussian Saxony.

ZONARITES Sternberg, 1833.

Zonarites flabellaris (Brongniart) Sternberg, 1833 (1820-38), p. 34. For *Fucoides flabellaris* Brongniart, 1828a-38, p. 67, pl. 8, fig. 5; alga?; Tertiary; Monte Bolca, near Verona, Italy.

ZONOPLEURA Massalongo, 1859.

Zonopleura hampeana (Stiehler) Massalongo, 1859. For *Delesserites hampeana* Stiehler, 1857, p. 56, pl. 11, fig. 12.

ZONOPTERIS Debey and Ettingshausen, 1859.

Zonopteris goepperti Debey and Ettingshausen, 1859b, p. 213, pl. 4, figs. 11-20; portion of fertile fern frond; Upper Cretaceous; Aachen, Rhenish Prussia.

ZONOTRICHITES Bornemann, 1887.

Zonotrichites lissaviensis Bornemann, 1887, p. 126, pl. 5, figs. 1, 2; pl. 6, figs. 1, 2; Rhaetic; Silesia.

ZONOTRILETES Waltz, 1935.

Reference not seen; cited in Gothan, 1942b, p. 160.

ZOOGLEITES C. E. Bertrand, 1898.

Zoogleites elaverensis C. E. Bertrand, 1898, p. 184, pl. 10, fig. 107; pl. 11, figs. 133, 134; bacteria?; Permian; France.

ZOOPHYCOS Massalongo, 1855.

Zoophycos caputmedusae Massalongo, 1855, p. 48, pl. 1, fig. 1; figure suggests *Isoetes*?; Eocene; Monte Bolca, Italy.

ZOSTERITES Brongniart, 1823.

Zosterites orbigniana Brongniart, 1823, p. 317, pl. 21; leaf, monocotyledon; Lower Cretaceous (Neocomian); Isle of Aix, France.

ZOSTERITES C. F. W. Braun, 1840.

Zosterites lignitarum C. F. W. Braun, 1840, p. 99; nom. nud.

ZOSTEROPHYLLUM Pomel, 1847.

Zosterophyllum articulatum Pomel, in Graves, 1847, p. 708; nom. nud.

ZOSTEROPHYLLUM Penhallow, 1892.

Zosterophyllum myretonianum Penhallow, 1892, p. 9, pl. 1, fig. 1; pl. 2, figs. 1-3; psilophyte; Devonian; Myreton, Scotland.

ZUBERIA Frenguelli, 1943.

Zuberia zuberi (Szajnocha) Frenguelli, 1943a, p. 308; fronds, cupulate seeds and microsporangiate organs; Triassic; Argentina. *See* Frenguelli, 1944a, p. 9, pls. 4-11, for full account.

ZYGOPHILLITES Keferstein, 1834.

Zygophyllites calamoides (Brongniart) Keferstein, 1834, p. 876. For *Zeugophyllites calamoides* Brongniart, 1828b, p. 123.

ZYGOPHYLLOCARPUM Weyland, 1938.

Zygophyllocarpum rottense Weyland, 1938b, p. 153, pl. 22, figs. 1, 2; winged fruit, Zygophyllaceae; Tertiary; Rott, Siebengebirge, Germany.

ZYGOPTERIS Corda, 1845.

Zygopteris primaeva (Cotta) Corda, 1845, p. 81; coenopterid fern; Carboniferous. For *Tubicaulis primarius* Cotta, 1932, p. 20, pl. 1, figs. 1, 2. *See also* Sahní, 1932c; Posthumus, 1931.

ZYGOSPORITES Williamson, 1880.

Zygosporites brevips Williamson, 1880, p. 516, pl. 19, figs. 51, 53, 55, 56; spore; Carboniferous; England.

ZYGOSPORITES McLean, 1912.

Zygosporites brevipes McLean, 1912, p. 509, fig. 5a; spore?; Upper Carboniferous; Dulesgate, England.

ZYMPANOPHORA.

Error for *Tympanophora*, in Hector, 1880, p. 47.

